

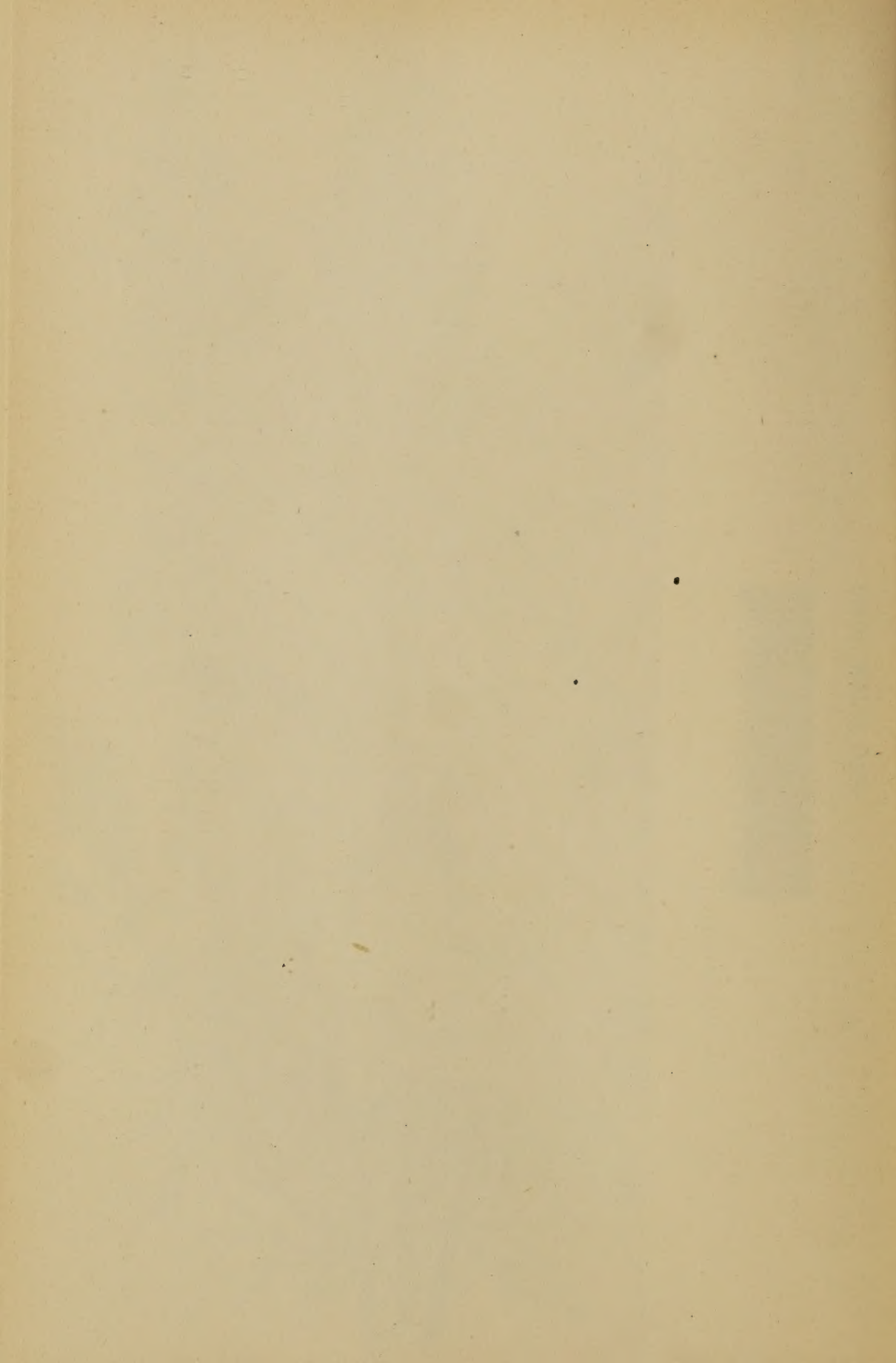
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DOUBLE DWARF ROCKET LARKSPURS

Painted for SEEDSMAN
JAMES VICK ROCHESTER, N.Y.





APRIL, 1888.

A GOOD GARDEN ensures the health of the family, and is worth all it costs. A timely and constant supply of fresh, ripe fruits and well-grown vegetables constitutes the principal part of a diet that will maintain the household in health, and this is the foundation of all the enjoyments of life. Of what avail is wealth, or scholarly or professional attainments, or personal accomplishments, or what satisfaction is a beautiful house elegantly furnished, without that first and greatest of all blessings, good health! Ask the wealthy dyspeptic, the broken down minister or lawyer, laid on the shelf by infirmities in the prime of years, or the nervous housekeeper, old in the

midst of her life. Eminent medical men advance the opinion that if we knew enough, and should properly regulate our modes of life, the attainment of a century and a half, or even two centuries, of useful years would not be impossible. Already, during the last fifty years, the average length of human life in the most civilized communities has been lengthened six years. The highest average of human life is now thirty-

six years, and yet, in the same communities, one-half the population die before the age of ten years. What a slaughter of the innocents! How we blush to measure our civilization by this standard. A proper diet is one of the highest considerations in the care of our bodies—it is a fountain of health, and an improper diet is the source of most of our ills under whatever form they may appear. Ripe fruit and fresh vegetables occupy the highest rank among the articles of a healthful diet, and these may be the pro-

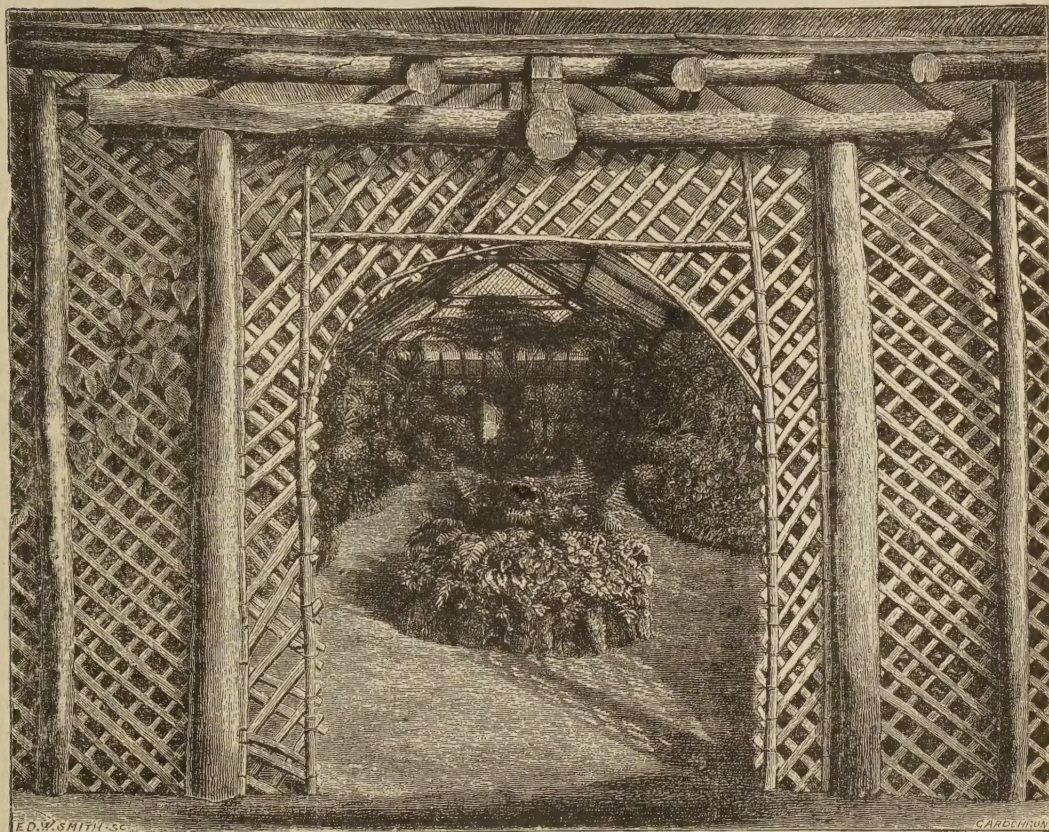
ducts of your own garden. Why should not the table of every family, at least of every country resident, be well supplied with the choicest fruits and vegetables the year round? There are few places in this country where it might not be so. If such is not the case it is because of inattention to the garden, and this may be the result of ignorance, or thoughtless or wilful negligence. If the reader should discover himself in either of these classes, it is to be hoped for humanity's sake, his own included, that he will start a reform, and begin it now. Let the garden be visited at once. If the necessary work cannot be performed by the members of the family, let a competent man for it be engaged. If the family is small and the garden small, it will take but a portion of a man's time, and neighbors' gardens will keep him busy. With a large family or a small one, there is no better investment than the wages paid to a capable gardener. If such a man is not easily to be found, it is because there has been no steady demand for him; and it is true that capable gardeners are not plentiful. Here is where the weakness of horticulture in this country is most apparent. As a rule, the culture of garden vegetables and fruit for a home supply, even by those situated so that they have every facility for the practice and can easily afford it, is left to chance, or the attention paid to it is but a slight skirmish in the garden in spring, which ends with a total abandonment in early summer, when the weeds make a square stand and obtain the mastery. This picture is not too highly drawn. Most families have only a supply of Potatoes and Onions, occasionally a few Turnips, a little Lettuce for a week or two in the spring—Radishes they fail to raise—a few "messes" only of Peas and String Beans, and some Tomatoes, and Sweet Corn for a short time only; as for fruit, it is mostly luck and chance. Now, who will say this is not true, taking the community generally? Why should not every village and country family have an abundant supply of Lettuce through the whole season, from spring to fall? Some of my readers will probably open their eyes with astonishment at this question. They have never heard of such a thing—perhaps don't know it to be possible, as they have only seen this refreshing vegetable

for a few weeks in May or June; they have no idea of the luxury and healthfulness of a good salad the year round. The knowledge of fresh, crisp Radishes, not wormy, consists, perhaps, of only a faint impression on the memory; Cucumbers taken direct from the vines and laid on ice long enough to cool, and then brought to the table are not thought of; a plentiful supply of tender Asparagus is unknown. And so we may look through the whole list of delicious and nutritious vegetables, and we shall find that there is no regular and plentiful supply of them to the tables of our people generally. How few have even attempted to raise Cauliflower, or Celery, or Egg plant, or Salsify? When we look for the supply of fruit that every good garden should furnish, we find a similar condition of things, or, perhaps, worse. Among those who make some slight attempt to raise fruits in the garden, the crop of complaints far exceeds the supply of fruit—the Strawberries didn't do well, the Raspberries were small and quickly dried up, the worms spoiled the Currants and Gooseberries, the birds took the Cherries, the curculio stung the Plums, the winter killed the Peach buds, the Pears didn't bear, the Grapes mildewed, and the Apples are all windfalls, and, altogether, the conclusion is that the game is not worth the candle. Fie, upon such spiritless attempts! Every one of these fruits might have been raised in perfection with good care, and if they were estimated at their proper value they would be. A good gardener would have his fruits in spite of all these difficulties, and if our gardens generally do not produce them in abundance, it is because we do not make sufficient effort thereto. The greatest difficulty among all those named is to secure a crop of Peaches every year, yet even this can be done in the garden when it is not practical on a large scale.

There should be a garden club in every town and village, to awaken and encourage a proper spirit in gardening, and it should have the sympathy and help of all who care for the health of our people and recognize it as one of the corner stones of the foundation of the physical and mental structure of the race. The ambition to raise good garden products should be one of the virtues of a good citizen.

A SUMMER SHELTER.

Under the name of "Chick House," the gardeners of India employ a light structure of lattice work for the purpose of screening tender plants from fierce sun and driving winds. The frame-work consists of strong posts set in the ground and connected by means of poles. Of these enough only are used to give the necessary strength and support to the lattice work, this last often being made of Bamboo, which, on account of its strength and lightness, is a superior material for the purpose. The engraving here presented of a Chick House has been prepared on a smaller scale from one that recently appeared in the *Gardeners' Chronicle*. That journal says that these constructions have been used "with advantage in some of the Italian Botanic Gardens, as at Pisa." It will be seen by a glance at the interior



FRONT VIEW AND INTERIOR OF CHICK HOUSE IN INDIA.

that the house shelters growing plants gracefully arranged in beds and borders. What use might not such a structure be in our climate, where it is impossible to raise some even of our native plants on account of the heat from the direct rays of our summer sun. How quite impossible it is in most places to produce any good effects with our hardy native Ferns, simply for the want of shade. Here and there a spot is found suitably sheltered, where they will thrive and show the beauties they possess, but on most places their culture is attended with difficulty, unless, it may be, a very few specimens. Then, again, there are what our British friends call "American plants," but which we natives know but little about; these are the Azaleas, the Kalmias, the Rhodora, and other related species. To be sure, these last are somewhat exacting in the character of the soil wherein they grow, but that can be made to suit—the principal want is that of a light shade, just such as this latticed house might be made to afford. Here we might even hope to raise successfully the Mayflower, or Trailing Arbutus, *Epigæa repens*. Many varieties of Lilies will do best when sheltered a little from the sun. Here could be plunged the Camellias and Orange trees from the conservatory. In this "sheltering arms" even

some of the lovely, much-prized flowering plants, like the Violet and Pansy and Daisy, might dare in security to lift their heads at midsummer. There is no doubt that a structure of this kind might be made very available in the garden in this country, where unclouded skies for weeks and months admit the free passage of the sun's fervid rays. Exactly how close the lattice work should be to give the necessary shelter and yet not shut out the light necessary for the welfare of the plants could be determined only by experiment. It will be well, this season, to make a test of this mode of shelter, at least in a small way, and in so saying we do not doubt in the least its efficacy. As for that, something similar in the form of lath screens are now in

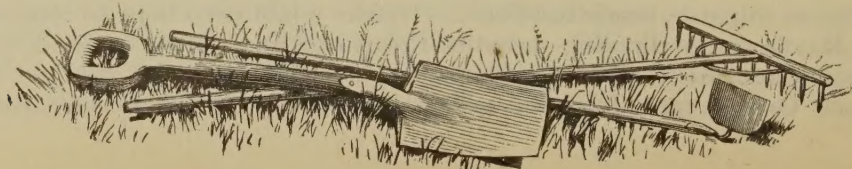
common use among nurserymen and plant growers to shade young plants—they are a part of the gardener's appliances; even a latticed house has been in use on our own grounds for a number of summers, occupied with pot plants. In placing a house of this kind in a sightly place in the garden, it should be neatly constructed, and have a pleasing entrance front. It is possible that in such a house we could succeed much better in raising Roses than in the open ground, and that their season of bloom would be lengthened. In winter efficient protection against cold could better be given in such a place, and probably advantages not now perceived will be made apparent when the system shall have been well tried.

DWARF ROCKET LARKSPUR.

These are some of the most pleasing and brilliant-hued flowers among the annuals. They are varieties derived from *Delphinium Ajacis*, an Alpine plant, and all prefer a cool, moist soil. The plants are easily raised by sowing the seeds in the open border early in spring, or, what is preferable, in the fall, so that germination may ensue at the earliest opportunity in spring. The seeds should be sown thin, scattering them broadcast over a space rather than in rows. If they stand four to six inches apart it is close enough; those that spring up closer to each other can be separated by transplanting. An occasional stirring of the soil and keeping it free from weeds is the extent of cultivation required. These plants are sometimes called Hyacinth-flowered Larkspur, on account of the long, narrow spike of flowers, in shape like the raceme of the Hyacinth, a feature from which the term "Rocket" is also derived. The shades of color are numerous, among which are mentioned white, white tinged with blue, Apple-blossom, buff, rose, brick-red, red lilac, dark lilac, azure, light blue, dark blue, violet and fawn. The varieties are seldom kept separate in common cultiva-

tion, the mixed colors appearing in a mass being quite as pleasing, as well as handy for cutting. The flowers are very valuable for cutting for vases.

In planting a flower garden we should never lose sight of those flowers desirable for cutting for the ornamentation of our rooms, and a good breadth of border should be specially provided for them. The shady side of a hedge is most suitable for those delighting in a cool soil or slight shade, while a full exposure best serves the sun-loving plants. A careful discrimination and selection should, therefore, be made of positions for plants of different requirements, if we rightfully expect to realize the highest results in our garden work. The beginner may probably make some mistakes in this respect, which will be corrected only by experience, still there is usually sufficient information at hand to guide one who carefully seeks to do his work in the best way. What to sow or plant, and how, and when, and where, are questions which the plant grower must never forget to ply. Timely asked and well-answered they form the key to most of the difficulties that present themselves to the young gardener.



FLOWERS IN CHINA.

China is called the Flower Land, not so much because it is a land of flowers, like Florida, but because China's people looked upon their country as having produced the flowers of civilization and culture. And whatever foreign nations may think of China now, the day was when China represented about all the culture and civilization of Eastern Asia, and it was from her that Japan borrowed her ethics and philosophy through the Confucian classics.

But many of the sweet flowers that adorn the gardens of America, and are represented in the pages of VICK'S MAGAZINE are quite as abundant in China as America. The Chinese have a passion for flowers. You may see, on the hundreds of canals that cut up the country around Shanghai, boats whose dingy and miserable appearance betokens the poverty, even the beggary of their occupants; and yet near the stern, on the top of the *saw-bang*, or cooking canopy—the “galley”—you will see from two to a dozen pots of flowers. Little Chinese girls nearly always place a sprig of some bright flower in their glossy tresses of raven black, and they sometimes show a good deal of taste in the arrangement of their nose-gays.

Just about the first of February, or near the Chinese New Year, one may see men and boys selling branches of a small bush that bears a yellow flower, somewhat resembling the Spicebush flowers of Virginia. This flower has, to a Chinese, associations bright and pleasant as those that clung around the far-famed Hawthorn that bloomed in old England on “Old Christmas Day.” You can buy in the market for a few *chien* or *cash** a little flower pot with a few bulbs of Daffodil in it, and by keeping it in the window of your room soon have a few bright looking flowers. The Chinese do not plant in their parks such elaborate flower beds as the Americans and Europeans, but they are very fond of pot flowers. I have seen a Wistaria at Nantziang, China, in an old park belonging to the Wong (King) family, the trunk of which was not less than five inches in

diameter, and it may be seven. It ran from tree to tree, and made, at one point, a beautiful rustic swing. The Camellia, or Tea flower, *Cha-hwa*, as the Chinese call it, is, of course, indigeneous and grows wild in China. On the mountains of Kiangsi Province the whole ground is said to be at times covered with lovely Camellias and Azaleas. Laurels and Bays are also well known in middle China. Of course, at Canton, which is in the tropics, the flowers are of gaudy hues, but those at Shanghai are among the most deliciously fragrant I ever smelled. The *Kwei-hwa*, or *Olea* fragrans, is highly prized by all classes, and is used metaphorically to signify literary honors. The *Lan-hwa* is a flower very often spoken of. The name, *Lan*, is used to designate various Orchideous plants, of one of which it is truly said by the Chinese, “Its fragrance is royal.” I have never smelled anything so delightful. It reminds me somewhat of the Lemon Verbena, or Citronella, but far more delicate in its fragrance. Cape Jasmynes are very abundant about Shanghai, so much so that they are frequently hawked about the streets by poor coolies who will sell a large bush in full leaf and blossoming for eight or ten cents, or less.

One great difficulty that a foreigner experiences in naming the flowers of China is that, unless he be a good botanist, he cannot get the equivalent in English of the local name. The common people, like those in America, have their own name for everything, and even a good dictionary affords no help—the local name is not to be found.

Since the foreigners have begun to buy land and build homes in China, the cultivation of foreign flowers has made rapid strides. The municipal council of the English and American settlements in Shanghai annually appropriate a good sum to maintain a public garden of an acre or two rescued from the mud of the Huangpu River, and now protected by a stone wall from the encroachments of the tide. In their season one may feast his eyes on the sight of old familiar friends. The most magnificent Tulips, Hyacinths, Lilies, fragrant beds of Violets, burning beds of Phlox, great ox-eyed Pansies of every hue, and an end-

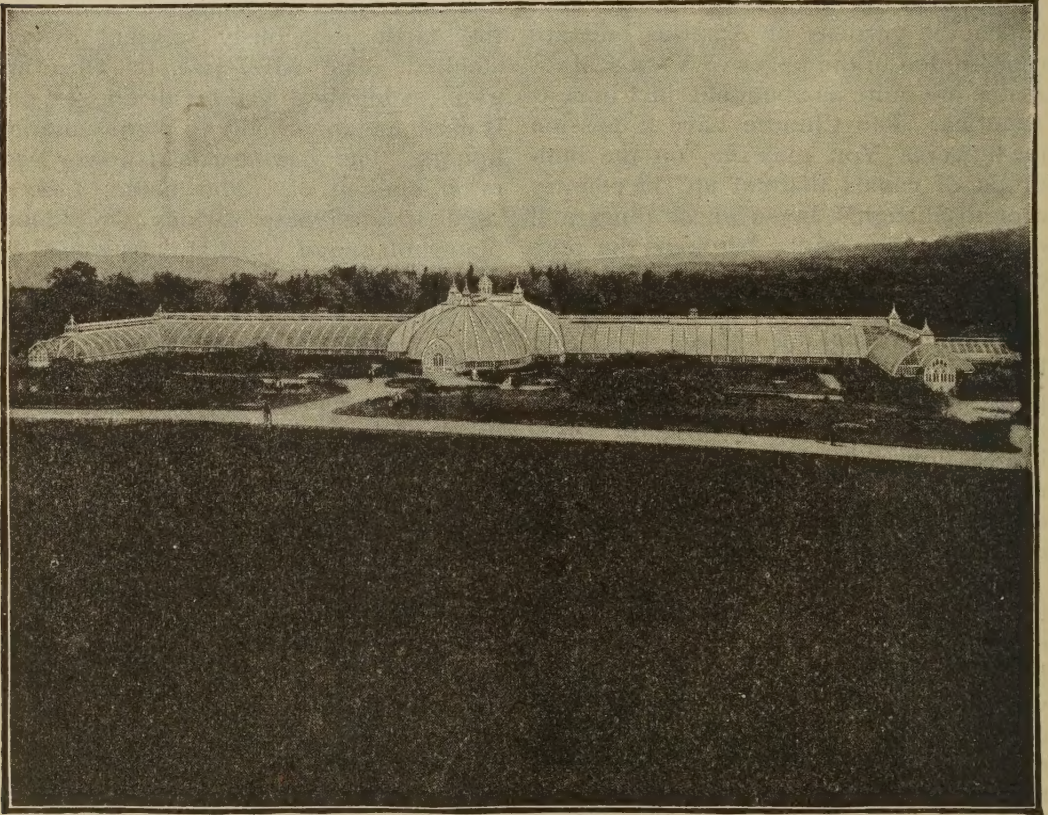
* *Cash* is the name given to a small Chinese coin, of which fourteen make one cent of United States money.

less variety of color and fragrance. The hot-house, made of iron and glass, and heated by a large flue, is filled with Geraniums, Ferns with great trunks like small trees, Heliotropes trained into various shapes, Cacti, Roses, and other flowers. It is a treat to leave the glare of the macadamized road and spend a brief hour in this fragrant bower.

WILLIAM W. ROYALL.

A GLIMPSE OF TROPIC BEAUTY.

Flowers have a double charm when nature's surroundings are bleak and dreary. To see them in luxuriance of leaf and bloom when but a sheet of glass stands between them and the wintry view of fields covered with ice and snow, appears like dream-land, or a vision too beautiful to be true. But it can be realized if in mid-winter you visit some of the large conservatories which belong to those fortunate



CONSERVATORIES OF JAY GOULD.

citizens who, with almost unlimited wealth and influence, can gather floral treasures from all parts of the world.

The conservatories belonging to JAY GOULD's country residence, near Irvington-on-the-Hudson, contain one of the finest collections of rare plants in this country. Through the courtesy of Mr. MANGOLD, who has had charge of the grounds and greenhouses for the past twenty years, the writer had the privilege, on the second day of January, of seeing the rare plants which are grown, under his care, in such luxuriance.

The main conservatory, the center one, and from which the others extend on each side at right angles, is built in the form of a mosque, and is eighty-five feet by seventy-five. In the center, ranged in tiers which form an immense pyramid, are some grand specimens of Palms, Tree Ferns, Dracænas, Crotons, etc., which reach far above you and fill the center of the large room so there is but sufficient space to walk between these plants and those placed about the sides. Mr. GOULD's Croton

collection is said to be one of the most complete in America.

On each side of the center conservatory there extends a long room, which, near its end, is intercepted by another conservatory crossing it at right angles. The center building is, therefore, a dome-like structure, with projecting arms ending in crosses, thus giving three front entrances. In one of these divisions were fine blooms of Tulips, Roman Hyacinths, Lily of the Valley. In another, Anthuriums in all stages of growth, from tiny seedlings, just showing a second leaf, to large plants with their singular and brilliant flowers.

The varieties of *Amaryllis* were exceptionally fine, and blooms abundant. There were large crimson flowers, each petal showing a pure white stripe, and white flowers with crimson stripes; others, still larger, had broad, spreading, white petals, showing a greenish throat. Then, the Carnations, a grand bank of them, with numerous blooms of fine color. Many choice varieties have originated in this conservatory.

In many of the rooms Orchids were suspended in rows, near the ceiling, and as fast as they advance sufficiently to show signs of bloom they are removed to the compartment devoted exclusively to Orchids and Pitcher Plants. To an Orchid lover, Mr. GOULD'S collection is a rare treat, for it includes the most beautiful of these wonderful plants. There are Orchids in all stages of growth, from the tiny plants just started in jars filled with cork and sphagnum, to mature specimens in full bloom. The day before New Years sixty-three of these blooming plants were sent to New York to Mrs. GOULD, but the absence of these did not leave a noticeable vacancy.

It has truly been said that what the Rose and Lily are among garden plants, the *Cattleya* is among Orchids—pre-eminently beautiful. The varieties in flower were exquisite. The blooms were very large and finely colored. Pale lavender or mauve flowers with a royal purple lip, or a rosy lilac showing deep crimson, seemed too frail and delicately beautiful to endure a breath. The *Cypripediums* were very fine, and the *Nepenthes* also, one plant of the latter had pitchers five inches long attached to every leaf.

The room devoted to Ferns is a fasci-

nating one; each variety seems to have a special attraction, from the delicate Maidenhair to that quaintest of all Ferns, the Stag's Horn.

What a fine plant is the *Ixora*. Its corymbs of scarlet bloom and its glossy, bright green foliage render it a brilliant object, and, as the culture is said to be quite simple, it seems strange that this plant is not more generally grown. It is hard-wooded, and is propagated from cuttings. The ordinary attention required by hot-house plants is said to be all that it requires. *Ixora coccinea* was in fine bloom in these conservatories. This species is a native of China and some of the East India islands, where it is worshipped as a sacred plant. It is described as forming, in its native habitat, a small tree, six feet high, rising with a single stem and having its head composed entirely of clusters of bright scarlet flowers. From its brilliant appearance it was named *Flamma sylvarum*, or the Tree of Fire. The usual height of the plants is about two feet, but there are two species—*Ixora arborea*, scarlet, and *Ixora parviflora*, white, which grow to the height of twelve feet in their native home.

A square tank, near the glass, in one of the end rooms, contained two Lattice-leaf or Lace-leaf plants. This plant, the *Ouvirandra fenestralis*, is one of the most interesting of aquatics. It grows with its leaves entirely under water. The young leaves are of a pale yellowish green color, and appear to be whole, but as they grow they assume the appearance of delicate lace work of a dark olive green color, and are usually about two inches wide and ten inches long when fully developed. The flower-spike was just appearing, but the flower is said to be inconspicuous, of a whitish color, and borne on forked spikes. The flowers are only useful for the production of seeds, from which the plants are increased.

In summer time the grounds surrounding the conservatories, when beautified with flowering plants, rare shrubs in bloom, and trees in full foliage, combine with the natural beauty of location—overlooking the Hudson at its most attractive point—to render the place a most delightful one, and one to which, I understand, appreciative visitors are always welcome.

S. A. F.

TUBEROUS BEGONIAS.

Beautiful summer-blooming bulbs that have only recently been introduced as bedding plants. They are easy to grow, requiring a rich, loamy soil and somewhat shady situation. After the full summer bloom is over, if bedded out, they should be taken up before the first frost, dried off, the same as *Gladiolus*, and put away in boxes of coarse sand or saw-dust, but whatever is used must be dry, and the position free from drip or frost; under staging of greenhouse or a secure cellar.

If grown in pots during summer, gradually lessen supply of water as the leaves indicate their approach of rest, and when entirely free from foliage, bury the pots in boxes of sand or saw-dust, as before directed for the bedded bulbs.

They will start about April, when they must be removed from the pots, all the soil gently shaken off, and repotted in clean pots with fresh soil. Keep cool, with full light, and air whenever possible, regular watering, never drowning nor drying, being sure the water penetrates the entire ball of soil.

The tubers intended for bedding can be planted directly in the beds any time after the tenth of May, or, if preferred, and facilities at hand, can be potted, same

as those intended to be carried over as pot plants, then planted out without disturbance of the ball of soil. They will be largely grown after one season's trial.

They are continuous bloomers in both the double and single varieties. Their colors range from warm, rich scarlet, soft rose, golden yellow, orange and pure white, making a wonderful surprise to one who has never seen them. They are now offered at very reasonable prices.

As the seeds are very minute and somewhat difficult to manage, it will pay to buy year-old tubers, which give masses of bloom in June after planting.

A novelty among Tuberous Begonias is *Louis Bouchet*. It is described as of "more than ordinary merit, forming a beautiful bushy plant, about one foot in height, and produces a profusion of both double and single brilliant scarlet flowers." The plants multiply rapidly from cuttings, always observing to cut just below a joint or eye, otherwise they will fail to break or start the second season. They are magnificent planted in a terraced rockery, where each individual plant shows its lovely foliage and clear, bright bloom.

MARIGOLD.

DWARF APPLE AND PEAR TREES.

A pretty thing in a garden is a nicely trained young dwarf Apple tree, or a row of them. They can be led into any desired shape, and it is lasting amusement and recreation to the amateur gardener to guide them into fanciful forms which does not debar them from giving him enjoyable fruit, always handsomer and finer than is usual on large trees. The sap has not far to travel painfully through thousands of cells and against gravity to reach the leaves from the root points, and so the leaves are completer, and the fruit better fed than on the big trees.

It used to be common in the neat French gardens, and probably is yet, to see rows of dwarf Apple trees trained like low horizontal fences at the back of flower borders, separating them from the vegetable ground. In other places they would stand here and there at intervals in the borders, their shoots pinched into

pyramidal form or left long, but reduced in number and trained to wires, giving them the shape of letters or figures of different kinds. To an admirer of handsome fruit nothing of the kind can be more delightful than the products of these trees.

There are many little mysteries bound up in this line of culture. Whatever objection may be made to statements about the mutual influence of the stock and the graft, a familiarity with the behavior of these manageable little trees, or rather bushes, will soon show proofs of its existence. A sort of Apple will often appear so different when thus grown as hardly to seem the same kind. But not every kind will do well on the dwarf (Paradise) stock, and Siberian Crabs, which ought to be more brilliant on them than on common Apple roots, actually refuse to grow after the first year; at least, that has been my experience. At

Chiswick Gardens it is said that, curiously, the Paradise stock will not live alone, but if some other variety of Apple is grafted upon it, it thrives.

Pear dwarfs on Quince show similar eccentricities. Only certain sorts of Pears make permanent trees on Quince roots, and they thrive better on some sorts of Quince than on others. The

Louise Bonne probably excels all other Pears in its attachment to the Quince, and dwarf trees of it are among the surest and most valuable of the tenants of the permanent fruit-growing division of a garden, being a regular bearer, and little liable to blight. No variety more than this has been cultivated on the Quince stock. W.

THE CHINESE PRIMROSE.

As the time is fast approaching when seed should be sown by those who contemplate growing Chinese Primroses for the coming winter, perhaps a few words about this most desirable house plant may not be amiss, at least to the new subscribers who have not read the articles on Primrose culture which have appeared from time to time in former numbers of this MAGAZINE. To those fortunate enough to possess those numbers I can say little, if anything, that is new; but to the uninitiated I would offer helpfully this bit of gratuitous advice.

If you wish for an abundance of winter flowers, do not fail to sow one or two packets of Primrose seed this spring, thereby laying a foundation for many pleasant hours during "the long and dreary winter," when you can count your blossoms by the hundred, instead of hunting diligently all over your window in the forlorn hope of discovering an adventurous flower somewhere, and finding "nothing but leaves."

Unless one purchases a packet of each variety of seed it is well to confine experiments to mixed seeds alone, for they are, as a rule, very satisfactory, producing so many and such diverse varieties, each of which has a charm pertaining only to itself, some peculiarity of color or marking, or, perhaps a difference of form or tint in the foliage, enhancing its beauty and effectually preventing monotony, which may exist even in the floral kingdom. The seed, if sown in March or April, the young plants pricked out into small pots as soon as they have put forth a few leaves, and transferred again after an interval of a few weeks into jars of larger size, should make strong specimens in autumn, and be ready for the winter's campaign, especially if grown in

a good strong light—not sunshine—which produces stocky plants. The chief desire of a Primrose's life seems to be, judging from appearances, to crawl out of the jar in which it is growing. This can be easily remedied by changing the abode of the delinquent, taking it out of the pot which it is trying to get away from and putting it into a deeper receptacle, removing, if necessary, a portion of the old earth from the roots, in order to admit of their being set so far down into the new jar that earth may be filled in until it reaches the base of the leaf-stalks and yet leave the requisite vacancy at the top of the pot for water.

If there is one thing that is disagreeable in watering plants it is to find one in a pot that is full of earth to the very brim, for in this case you must either go through the tedious process of putting on the water a few drops at a time, or, if tired out by this lengthy ceremony, you get reckless and pour on the water as you would under ordinary circumstances, you have the sublime satisfaction of seeing not only the water, but also a good share of the soil in the pot, make a wild rush over the side into the most inconvenient and undesirable place to be found on such short notice, no matter whether it be the leaves and flowers of some plant on a lower shelf, or on your best carpet, or your last new book if you have been careless enough to lay it down within reaching distance of the deluge.

It is well to shift the Primroses into pots of larger size as soon as they have filled the smaller ones with roots, but when they have attained the dignity of a five or six-inch pot they may be placed in the window where they are to remain through the winter, and allowed to grow on unmolested, as they will do nicely in a pot of that size.

There are two facts which those who hope for success with the Primrose should bear in mind: first, that a mellow soil or compost is an absolute necessity, from the reason that the roots of this plant consist of a mass of delicate fibers utterly unable to contend with clay or gravel, and unfitted by nature to wrestle with the difficulties of hard-pan; secondly, that too much water will soon cause decay; a reasonable amount is, of course, required, if the best results are to be attained, but this is to be applied at the root and not on the foliage; it is better to err by giving too little than the reverse, as the Primrose will live and produce flowers with a very slight amount of moisture, while a superabundance is fatal. Like some other plants with hirsute leaves, the Primrose seems impatient of water on its foliage, it is, therefore, best, as much as possible, to guard the plants from dust during the sweeping season, on the principle that "an ounce of preventive is worth a pound of cure."

I feel rather like a culprit, an individual who forswears his allegiance to an old and tried friend, when I say that, on the whole, the Primrose is a better winter house plant than the Geranium, especially for those who have limited space. The Geranium must have room and sunshine in order to grow in such a manner as to give many flowers, while the Chinese

Primrose will send forth its masses of bloom in the despised north window without even the benediction of a ray of sunshine. Being a plant of lower and more compact growth than the Geranium, the shelves which contain it may be quite close together. A stand with the shelves not more than six inches apart, and well filled with these plants can be made to assume the appearance of a bank of Primroses, the pots and shelves being almost hidden with the foliage and flowers. Its long period of blooming renders the plant much more desirable than many another of, perhaps, more striking but evanescent beauty. The individual blossoms remain perfect for days, and as one whorl begins to fade another rises to the occasion, supplying the deficiency, and before the successive tiers on the first stalk have finished their display, new clusters are peeping up from the base of the plant to increase and intensify its beauty.

Perhaps, however, one of the greatest charms of this pretty flower is the delicate odor, so suggestive of May blossoms, and the "green things growing," that one can forget the bleak landscape outside, with its leafless trees, barren fields, or dazzling glare of snow, and in fancy step across the intervening months of cold and discomfort into the fairyland of spring.

MRS. LUNEY.

FAVORITE FLOWERS.

King SOLOMON surely never had the pleasure from his gardens, filled with all manner of plants, that some of us find in gathering, season by season, our small and treasured collections. Two or three fresh things each year to watch, and to delight in the surprise of their opening, allow one to taste the full, perpetual flavor of gardening, that dewy Eden pleasure which lasts the ages and is new as the morning. Creation is not ended if one keeps a garden, where the Invisible Hand forever prompts some new sport of Rose or herb, as if it never could be quite done its preferred work. There is a premium on ignorance among flowers, for how else shall one know the bliss of the first acquaintance with the choicest. Yet the more we know of flowers the more they reveal to us, and so the

happy marvel lives and lasts as long as life.

A happy chance at a flower auction espied a lot of apple-scented *Salvia* left unsold without a single bidder. It did not take long to make me the owner of that score of plants, attracted by the fresh odor of the leaves, a fragrance perfectly true to name. Fragrant leaf plants are a specialty of my garden, and it is a high delight to pounce upon a new plant which proves the race of novelties is not run out of that sort. The plants grew and waxed strong, fully two feet high, bushy and spreading. They were set out late, and not till the last of August were they crowned with brilliant crimson spikes, to my delight as vivid as the Cardinal *Lobelia*. To have all the good qualities, pleasant leafage of refreshing scent,

hardy growth and the most brilliant, lasting bloom, seems like a special gift in a new plant, and this *Salvia* at once took an advanced place in favor. It stood sharp frosts without injury or prostration, frosts that blackened the Dahlias and killed the Asters. Not till the regular freeze of the 15th of October did a leaf turn on the *Salvias*. The slightest protection then would have kept their beauty, but I trusted their strength too far, or, rather, it was colder than I knew. That frost would have nipped the nose off a *Chrysanthemum*. The *Salvias* were not killed then, and the great woody plants were lifted to a cold-frame to recruit at leisure. Not the least of their good points is their ease of rooting, the sprouts striking into mellow soil as promptly as *Verbena* claws.

By the way, few things are prettier for the house than a basket of *Verbenas* rooted in fall. An assortment of the bright blooming plants should be lifted early to veranda boxes, where they bloom in shelter six weeks after the garden goes into mourning. German *Phlox*, *Verbenas*, black, pink, and white variegated with crimson, *Browallias*, *Daisies*, *Nasturtiums* and *Tea Roses* are most brilliant in their latest bloom. They get a Californian climate in autumn, which just suits them, provided they are out of reach of frost.

Another specially desirable plant for house or garden is the variegated-leaved *Hibiscus*, which is neither the big red Chinese *Hibiscus* nor the common garden, herbaceous plant, with straw and brown blossoms. This variegated *Hibiscus* I think is a native of *Tahiti*; a graceful plant in form, with its woody stem and spire of leaves, like our woodland *Birch*, down sweeping, and brushed with the softest pink, cream and crimson, relieving the glossy, light green leaf, it is an elegant thing; the markings not pronounced, but coloring one edge, or, perhaps, one-third, of a leaf, like the finest *Eranthemum*. As if this were not enough, it has a charming crimson flower, tipping the painted green, as if it drew the color to a point. For a house plant nothing could be much finer. A *Fuchsia* with painted leaves would give an idea of it. This *Hibiscus* is as tender as the *Fuchsia*, and takes the same care to shade from violent sun and frost.

Poor soil, and sprinkling, rather than soaking, bring out the beauty of its leaves.

Nor should the *Santolina* be omitted from the garden favorites. This beautiful little gray plant, hardy as *Sage* and as modest, has an exquisite branching habit, like a slender vegetable coral. Its whitish stems and pale leafage are like a silvery crystallization that deepens to a fresh green tint in the heart of the plant. It grows in lowliest mood till the little pearly sprig of a cutting forms the most regular, close, round cushion resting on the ground. It has the fragrance of the White *Sage* of the Rocky Mountains, though less penetrating, and has medicinal properties of its own. The blossom is insignificant, yet it is quaint to see the cushion of green studded with straight stems, like long silver pins with Etruscan gold heads. The foliage is one of the choice things for mixing in bouquets, it blends, softens and throws out the hue of flowers so charmingly. A knot of this silvery green coral with the vivid purplish-crimson buds of *Bennett Rose* is artistic perfection. Such exquisite studies in white it made, last summer, with snowy *Stocks*, waxen *Tuberoses* and creamy *Ageratums*, with a white *Pansy* or two. *Carnations* looked better with it than anything, except their own grass. In short, it was so kind to every flower that the last thing put with it seemed best. I shall always grow a dozen plants for cutting, as one is reluctant to mar the symmetry of the specimen plants by breaking a single sprig. It grows from cuttings easily as *Sage*, and will be one of the standards of all gardens when it is better known.

You who sigh for *Orchids*, dismiss the fancy, and grow garden *Iris* instead, to heart's content. If there is anything to choose between a great white *Florentine Iris* and an *Odontoglossum Alexandræ*, it is on the side of the *Iris*. Compare the flower of luxury in its festoons of sensuous, lavish bloom, with the royal garden flower, stately as if it were a kingly emblem, still pure, graceful and clear of hue as one of the grand *Cattleyas* which Mr. KIMBALL gave, it was hinted, over \$100 for, at the *Orchid Show*, last winter. For grace of form and dazzling purity of petal, the white *Iris* is the only flower to call cousin with the *Cattleya*, and what an aristocrat for association it

is in comparison—a Lily-like Orleans daughter, with her endless lineage, beside a South Sea princess, beautiful as dawn. If you don't find variety enough in the families of Iris, nothing short of a fortune in Orchids would do the least good. No disparagement to Orchids, which have given me some lovely hours dreaming among their blossoms at the crowded flower shows. But fashion vulgarizes them in making them just exponents of so much money, like finely wrought bank checks, or a harem of white beauties. They savor of stout, solid stepping, high-fed gentlemen and showy women of exuberant corsages, of political dinners and actors' supper parties. If they could speak, I fear their voices would be harsh, and their grammar bad as a ballet girl's, as beautiful as themselves. The Orchids from the Botanical Gardens, or professional growers are almost the only ones unspoiled by associations. It is a private whim to care less for Roses from the florist than

for those cut in a home garden. With Orchids, the case is the opposite. Those belonging to private owners have the deadly rich air, which leaves their fragrance flat. They are flowers without soul or virtue. I felt so since the day at the Eden Musée exhibition, when captivated by a peerless *Cattleya splendida*, two heavy-footed men came up to it, one with an air of ownership. Did he praise its pearly petals, its rare unfolding, the airy life that almost quivered in the lustrous blossom?

"Look at it," he said, waving a stout hand over it, in coarse contrast. "Its the biggest in the show, and there aint one in the city of the same v'riety. Send it to MARIA, to-night, f'r her supper. Not another woman has one in the whole block."

And every household might have a White Iris, and each flower would be nothing less than a marvel, grown in the sun and air of heaven.

SUSAN POWER.

THE SERVICE TREE.

Fair vision of young grace and innocence,
Spring's delicate spirit, seems the Service tree,
Waving its milky blooms to tempt the bee
Its stores to search, and all their sweets condense.
Summer will gem its green with small expense
Of juice and savor; purplish berries, free
To birds and climbing boys, better to see
Than taste; small service, this, to grosser sense.
Why Service Berry, then, and such pretence
To special usefulness? Ah, plain the plea!
Its beauty still attests its right to be
Herald of nature's resurrection; hence,
Service indeed! it fills the longing eye
With fair mirage of summer's glory nigh.

ABBY S. HINCKLEY.



FOREIGN NOTES.

PROPAGATING LILIES.

Sometimes in taking up a Lily bulb it will be found that, owing to an injury or to some other cause, the center of the plant has become decayed, and nothing is left but a handful of scales. Should the bulb be one of *L. auratum* or of *L. longiflorum*, the probability is that each scale will have formed a small bulb, and while all Lilies more or less do this, the two mentioned above are far more prolific in this respect than any other kinds. It is therefore evident that if these small bulbs are placed under conditions favorable to growth they will continue to increase till they reach flowering size. *L. longiflorum* will do so without much trouble, but *L. auratum* is very fastidious in its requirements, especially during its early stages. We sometimes hear of this Lily being raised from seeds or scales and naturalizing it in this country, but this is somewhat difficult, as failures are pretty frequent; meanwhile, the fact remains that an almost unlimited supply of young plants can be raised. It is a significant fact that the Dutch bulb growers do not send us any *L. auratum* nor the allied *L. Krameri*, as they would, no doubt, if they could grow them in that country, for the bulbs would arrive before those from Japan, and consequently, if good, command a fair price. *L. longiflorum*, on the other hand, grows freely from scales. There is, however, a great deal of difference in the varieties with regard to this matter, the slowest of increase being the long-tubed *L. eximium*, and the most prolific *L. Harrisii*. A good crop of this may be obtained by taking off any loose scales when potting the bulbs that are intended for flowering and placing them under conditions favorable to the formation of roots. In the case of large bulbs there are on the outside often two or three scales which are very loose, and can easily be removed without injuring the future display of bloom. Many of these scales are naturally jointed just in the middle, and when this is the case they may be at once broken in two, as each part will form a small bulb. These

scales must be treated just like seeds, that is, placed as thickly as possible without touching each other in pans or boxes, and covered with light sandy soil. These pans or boxes must be drained thoroughly, and filled to within an inch of the top with a compost consisting of peat, loam and sand, the whole sifted moderately fine. If placed in a gentle heat the young plants quickly make their appearance, when as soon as sufficiently developed they may be potted off. So quickly do they grow, that by the summer these young plants can be planted out, and will form nice little bulbs the first season; indeed, a few of the strongest will flower. Of course, only a few will bloom early, and those that do so will only produce one puny blossom. A very good method, and one that gives far less trouble than this, is to prepare a place on a well drained border and cover with a frame, as so treated the young plants will not need to be disturbed. In either case, if the place is thoroughly drained, it is better to leave the bulbs undisturbed the first winter, protecting them from frost with dry leaves, Fern, or some other material. So treated, the greater number will flower the next season, and in the autumn may be taken up, when they are available for potting and growing under glass for in-door decoration if required. Besides this method of increasing these varieties of *L. longiflorum*, many of the bulbs after flowering divide into two or three, while small bulbils are formed on the underground portion of the stem, especially if they are buried rather deeply. Some kinds increase very rapidly by means of division, notably *L. elegans* or *L. Thunbergianum* and its numerous varieties, *L. umbellatum*, which is so largely imported from Holland every year, and *L. croceum*. Others, again, increase in this way, but very slowly, and of these mention may be made of *L. monadelphum*, *pomponium*, *tenuifolium* and *pulchellum*. They, however, all produce plenty of seeds, which germinate readily enough. Those with creeping rhizomes, represented by *L. pardalinum*, *puberu-*

lum, superbum and Canadense, are all easily increased by division; while some that can seldom be coaxed to grow are *L. Washingtonianum*, *rubescens*, *Humboldtii*, *columbianum* and *Bloomerianum*. The small bulbils in the axils of the leaves afford a ready means of propagating the Tiger Lilies and *L. bulbiferum*, for wherever they come in contact with the ground they at once take root and commence to grow.

T., in *The Garden*.

CAMELLIA BUDS FALLING.

Some years ago I took charge of a choice collection of Camellias, all of which, growing either in pots or tubs were, with five or six exceptions, very healthy. They had, however, always shed their buds just before bursting, while those that did flower developed bad and imperfect blooms. I learned from those in the garden that the plants had not been out of the house since they had been purchased; therefore, the following year I determined to let them set their buds out doors, and for that purpose I selected a spot sheltered from the wind, but exposed to the sun. I put the plants out as each one had finished its growth, arranging them so that the air could circulate freely amongst them. In this position the plants set a large quantity of buds (as I was told they had done before when kept inside), which were in time duly thinned out. My anxiety, of course, increased as flowering time came on to see if my experiment had the desired effect, which I was gratified to find it did, as very few of the strongest growing sorts threw any of the buds, and only those of more slender growth or perhaps badly rooted were unsatisfactory. An additional reason afterwards occurred which caused me to think my treatment so far was the right one, as in the course of time four of the largest plants, two white and two red varieties, were wanted for permanent places in the conservatory, from whence they could not be taken outside. These plants in two years also began to throw off most of the best buds, although they were as healthy as before. I therefore came to the conclusion that out door treatment for part of the time at any rate, was one safe point to follow, and I would advise those who complain of their Camellia buds falling prematurely

to try this experiment. I do not assert that keeping the plants always in doors is the only cause of the buds dropping. Badly rooted and unhealthy plants, unsuitable soil and bad drainage, or a sudden check in growth, too high a temperature, or neglect in watering, will all cause the buds to drop. I believe that in many instances Camellias are coddled too much, and, considering that they are a comparatively hardy class of plants, I am decidedly of opinion that to be successful no plant needs a more even temperature, and that at no time a high one.

THOMAS RECORD, in *The Garden*.

PRIMULA CULTURE SIMPLIFIED.

A writer in the *Journal of Horticulture* describes a method of raising Chinese Primroses by planting them out during summer, and the editor of that journal testifies to the success of the method last season.

"In drawing your readers' attention to the above system of treating Primroses through the summer, I do so with a desire of urging others to try the plan themselves. Having placed a few dozen plants outside at the end of last June, which were lifted at the end of September, with the result that they have flowered profusely since the last week in October, I can with confidence recommend this mode of growing Primulas, particularly to amateurs who wish to retain old plants another season. I would advise those who possess plants that will be flowering from now to May to plant them outside in June; such will not need much hardening previous to being planted. If they are planted about two feet apart in a position rather shaded, not under trees, but with a few hours' sun on them through the early or latter part of the day, it would be of benefit rather than otherwise. Those desirous of giving the plants a little fresh soil when they are planting might do so with advantage, but it is not really necessary, for they will grow in any good garden soil. If fresh soil be used the finer the better, for then the soil adhering to the roots can be readily removed when they are lifted without injuring the plants. I have several plants that had the soil removed from the roots until they could be placed in five-inch pots.

"I intend sowing seed early in March,

with a view of having the plants ready for planting out in cold-frames in June, where they will remain until the autumn. I believe this idea will answer, and will commend itself to those who have to provide a large number of plants for decorative purposes. Not half the work will be required when they are planted out in frames as when they are grown in pots through the summer. I find the young plants always do well in their early stages, when they are growing in pans and boxes; therefore, I think they will do well when planted out in frames for three or four months through the season, and at a time when gardeners are fully occupied. If this method of planting the old *Primula* plants outside was to become adopted there would be a great many more growers of this most beautiful plant. If they could be purchased in May or June, and treated in the manner described above, I think those not even possessing a cold-frame could have them flowering through the autumn and winter. Seed sown in the autumn would produce plants readily for placing outside in May and June following. If growers of plants for sale were to find there was a demand for them at the time indicated I am sure they would soon avail themselves of the opportunity and be in a position to supply plants at a reasonable cost."

CYCAS REVOLUTA.

A writer in *The Garden* describes a visit to a *Cycas* nursery in Leipsic, where "nearly all the houses were filled with *Cycas* in various stages of development, from the adult specimen with trunk-like stem ten feet or more in height, down to the miniature plant with a stem no larger than a hen's egg. One large house contained a number of plants, the like of which—taking quantity and size into consideration—would not be found in Europe. It was like walking in a

miniature forest, the big Fern-like leaves meeting overhead on all sides. * * * Their existence is due to a curious custom peculiar to Saxony, and, I believe, to some portions of Hanover. This consists in the mourners at funerals carrying in their hands evergreens of some kind. Those who can afford to do so use Palm and *Cycas* leaves. * * * Independent of the utility of *Cycas revoluta* for the above mentioned purpose, it is a very favorite room plant all over Germany. It would run *Aspidistra lurida* very close indeed in the race for popularity, but it cannot be sold at such a cheap rate. * * * A special culture of this plant has sprung up in Cuba, where, I am told, it is grown in large quantities in open fields. One large German nurseryman imported a great number of small plants suitable for pots from four and one-half to eight inches in diameter. * * * When the *Cycads* come over they are more or less hollow at the base, many of them half way up the stem. This cavity is filled with crushed charcoal, and they are then put in pots that will just hold them, half filled with drainage, and are put in strong bottom heat. I have treated hundreds in this way, and had but few losses."

DAPHNE INDICA.

Notwithstanding the fact that this is one of the sweetest-scented flowers, it is seldom met with in good condition. It is naturally somewhat sparse of foliage, and being also a scant rooter, it usually thrives best when confined to small, well-drained pots, in a compost of fibry peat and light loam in equal parts, liberally mixed with sand. It is also impatient of free watering. Its value when in bloom in the conservatory can scarcely be overestimated, where its delicate odor and pretty white flowers are always appreciated.

Gardeners' Chronicle.



PLEASANT GOSSIP.

ROSES-GERANIUMS-PLUM TREES.

Will you have the kindness to inform me how best to prepare beds for Roses and Geraniums—what kind of fertilizer to use, and especially regarding the situation. Would the unshaded south side of the house be preferable or advisable for either, or a spot which would be partially shaded?

I would also like some advice regarding Plum trees. I have some about fifteen feet high, which have never blossomed, except one which had two blooms on it last year. They were set out eight years ago, I think. They are south of the rear end of the house, in flower beds, near a hedge of Balsam trees. Now, shall we cut them down, or is there some way in which we can make them productive? If you will answer these queries I shall feel greatly obliged.

M. A. S., *Battle Creek, Mich.*

Beds for Roses and Geraniums can be prepared from ordinary fertile soil by digging in well rotted stable or cow manure—a layer of two or three inches in thickness. Roses especially, need a good dressing of old manure every year, if they are expected to produce an abundance of fine bloom. An entirely open exposure is best for Geraniums, but Roses are all the better if they are situated where they have a light shade during the middle of the day. They should not, however, be placed under trees.

The hopeful sign in regard to the Plum trees is that one of them had a few blossoms last year. Probably they have been making a strong growth; now, as the soil in which they stand has parted with a portion of its excess of fertility there will be a greater tendency to bloom. Without knowing more of their real condition we hesitate to advise any heroic action to promote their fertility, but suggest that the indications are favorable to fruit-bearing, and that at no distant period patience will receive the fruit of her "perfect work."

FAILURES WITH HOUSE PLANTS.

I would like to know the cause of Geranium leaves turning yellow and dropping off, and the cause of Heliotropes, when growing thriftily, to droop and die in a few days. I have had two do so in the past week. Is there anything that can be used to make flowers bloom in the winter? My plants look pretty well, but very seldom have any bloom on them.

Mrs. G. W. S., *Georgia.*

More of the failures among house plants are probably due to the one fact

than any other, that we desire to *make* them bloom in winter, and in carrying out this intention we neglect to study and minister to the requirements of the plants, being intent only on our own ends. The skillful plant-grower makes the welfare of the plant his first object, knowing that the healthy plant will perform all its functions. The winter is a season of rest to most vegetation, and especially the early months. The above inquiry was written in January, and at that time the plant in question required its annual rest, and overwatering then, with the view of *making* it bloom, had only the effect to cause it to drop its leaves. In regard to the Heliotrope plants inquired about, it is impossible to say, without knowing the treatment, what was the exact cause of their death, but there was a cause, and a careful investigation probably would have revealed it—perhaps stagnant water at the roots from insufficient drainage, or it may have been from some other unsuitable condition. Some plants bloom more freely than others in winter, and if we are to have flowers at that season, we must have winter-blooming plants and give them their proper treatment.

PLANT QUERIES.

Does Smilax bloom and bear seed? If not, how am I to get new plants? I have had mine two years and have simply the old plant.

How should Coleus be kept through the winter?

Does Farfugium grande require rest any time during the year? Does it need plenty of water? We have very hard work to keep it growing.

O. L., *Carlton, Oregon.*

The Smilax—*Mirsyphyllum*—if properly managed and kept in health, will bloom about mid-spring and ripen its seed early in summer. The old plant mentioned is now better fitted for seed-bearing than when young, and it will probably bloom this spring.

There is no trouble in keeping Coleus through the winter in an atmosphere suited to it. Frequently in the house there are changes in temperature so great as to injure the health of delicate plants like this, which requires pretty

uniform heat of 60° to 65°. The air of the room is also often too dry for it. As a rule, the *Coleus* kept over winter in our northern homes, presents a rather sorry appearance in spring, and it is better to leave it out of the collection of house plants.

Farfugium grande, after its summer growth, remains at rest for a time, and then it should receive water but sparingly. After two or three months it is ready to start again if conditions are favorable, or it will remain dormant longer.

MOUNTAIN OF SNOW GERANIUM.

Will you please tell me why the Mountain of Snow Geranium grows so shabbily, only a tuft of leaves at the top of the stalk. I am not alone in this complaint, as several of my friends have the same fault to find with it. I give mine the very best treatment I know.

A. V. R., *Rushville, Ill.*

The reason is lack of vitality caused by the peculiarity of its partially white leaves. The white portion is destitute of chlorophyll and affords no assistance in the assimilation of nutriment and the building up of the plant—in fact, this portion of the plant is supported at the expense of the green part; it may be considered in the nature of a parasitic growth. Plants of this kind need rich soil and the best of culture. Their beauty is the beauty of disease.

ENGLISH VIOLETS IN THE HOUSE.

Will some one tell me, through the MAGAZINE, how to raise English Violets in the house?

H. C. L., *North Platte, Neb.*

INCH PLANT.

A SUBSCRIBER inquires about the Inch Plant. Can any one inform us of a plant by this name?

SPRING NOTES.

In North Carolina we call it spring as soon as the pink of Peach buds begins to show, the frogs to cry from the marshes, and tiny green lances springing up from the sod, bring a promise of future bloom and beauty. But last year I lost some of my best seeds by sowing them too early, for winter, after holding out false promises, had a relapse, and this year I shall be more cautious, although these warm winds stir one up for garden work, and when one's space under glass is full, it

seems too bad to crowd it with annuals, which bloom so early when sown in open ground.

Florists' catalogues, with their novelties, are terrible temptations, but the old favorites, weighed in the balance, tried and proved by burning suns and adverse circumstances, must be counted up and generous space allotted them before places are assigned the yet unknown.

For masses of brilliant color, nothing new or old can equal the *Phlox Drummondii*, and certainly no flower I ever tried to grow has bloomed for me so persistently from May until October as this. I had an early circular bed of it, last year, sowed in March and covered with Pine needles, which gleamed like a ball of fire all summer long; the texture of flower is delicate, too, and Geranium-shaped in its truss, and though we sometimes wish for it a more stocky stem, I doubt if its graceful, recumbent position could be improved upon. I have not met this old friend of mine in many of my neighbors' gardens lately, therefore I mention its good points to remind them that it is still peerless.

I shall always have a bed of *Calliopsis*, on account of its strange, bright coloring, and the Daisy-like flower on long, slender stems are really very beautiful, shading in color often from a brilliant orange or a lemon yellow to a reddish-brown. I sow all my seeds where they are to stand and then if they are too thick, thin out, and give plants to some neighbor poorer in purse or bodily strength than myself.

Scarlet *Salvias* bloom in autumn, beginning generally in August, and making a grand display. Mine stand up three or four feet in height, so that I can only use them as a center piece for lower growing groups, or for screens. The Madeira Vine blooms at the same time of year, and spikes of scarlet *Salvia* mixed with its dainty, cream-colored sprays and a plenitude of Ferns, make up a bouquet of surpassing beauty. Besides, the *Salvia* may be lifted into pots, in autumn, before frost touches it, and bloomed in the house for half the winter.

Last year I tried the new double Daisy, "Long Yellow," and found it more beautiful than even my imagination had painted it. It is a dainty, rose-colored little beauty, with flowers borne well above foliage, and delicate charms enough

to more than captivate any person of refinement.

Freesia refracta alba was another new investment which paid me well in blossoms and perfume, and another new white bulb, which I am trying, is *Gladiolus Colvillii*. It is said to be winter flowering, but it has not bloomed for me yet. I do not see why the *Gladiolus* is not more popular South where it is so little trouble to grow. Mine remain in the ground over winter with no extra covering, and in July and August are regal in their robes of scarlet and yellow, white and crimson, with every shade of coloring between. They are peeping up now, in defiance of frosts, but I shall not protect them, and all the care I ever give them is to divide the masses of bulbs now and then, to give the fast increasing smaller ones a chance, and to tie up the tall, heavy spikes to some support in autumn, during their flowering season. From the long lists in catalogues one may choose the most exquisite colors, and right royally does this kingly flower repay the minimum of care which it requires.

LENNIE GREENLEE, *Greenlee, N. C.*

FLORAL GOSSIP.

A correspondent asks if I think she can grow any flowers in a little back yard in the city. She says the sun shines there part of the day, but as near as she can judge by the looks of the yard, it has never been planted to anything but old cans, boots and shoes, and rubbish of that sort, and she would like to have a few flowers growing there next summer if I can tell her of any that I think would do tolerably well.

I have in mind a little yard not more than ten by twelve, where I saw some really fine flowers growing last summer. The yard belongs to a house occupied by a lady from the country. "I have always had flowers," she told me, "and when I came to the city I felt as if I could not go without them. I told my husband that I was going to try my skill at flower-growing in the back yard. He laughed at me, and that, of course, only made me more determined. I hired a man to turn up the soil to the depth of at least a foot. It was hard and clayey, but I had him break it up as well as he could, and put in some rubbish from an old house that had been

torn down near by, made up of mortar, mostly. The sand and lime answered a double purpose. It made the soil lighter and more porous, and acted as a food for the plants. I made the beds myself, and sowed in them *Petunias*, *Phlox*, *Sweet Peas*, *Nasturtiums* and *Balsams*. I put the *Nasturtiums* in the sunniest corner, because they love warmth. Along the side of the house I planted *Morning Glories*, and I even went to the extravagance of buying a *Moon Flower*, which was planted beside the kitchen door. The work, seed, and old mortar cost me, all told, \$1.68. Do you suppose I could have expended that amount of money, or ten times that amount, in any way that would have afforded me more pleasure than I got from my little garden? I don't. I had flowers there from June to late in the season; flowers to look at and flowers to give away, and good flowers too. I had been told that it was impossible to grow good flowers in the city, but I did not believe it, and now I know that it is not so. If you will prepare the soil well for the reception of seed, and take good care of the plants, I see no reason why you should not grow some of the more hardy and robust kinds quite as well as in the country. I think the reason why some have no luck is, they just scratch over the soil, which has become packed and hard, and the tender roots of the young plants are unable to penetrate it, and after a little the poor plants die for lack of food. I used all my wash water and slops on the beds, and spent a good deal of time among them, stirring the soil that the air and sunshine might get into it and sweeten it. I shall try *Gladiolus* and *Dahlias* next season, and I know I can make them grow in my little garden. You have no idea how much I enjoyed it. It was better than theatre or concert to me. It was both and more."

I think the experience of my friend, as given above, will quite fully answer the question of my correspondent. From personal observation, I can say that her flowers would have done credit to any country garden. The great secret consists in taking good care of them. Unless you take good care of them, you can not expect to have good flowers anywhere. I would advise the lady to try her hand at flower growing in her little yard, by all means.

A lady writes to ask how she shall winter her Hibiscus. She says it grows well every summer, and blooms well all the time, but in winter, when she wants flowers from it, it will not bloom, and drops its leaves.

I do not think this plant ever gives much satisfaction in the house. It is really a deciduous plant, and must have rest, and if put in the cellar, it can be allowed to drop its leaves without injury. There it will rest from its summer work, and gain strength for next season. If her plant blooms all summer she can not expect it to keep on blooming all winter. No one has a right to expect any plant to bloom all the year round. In the greenhouse the Hibiscus makes a fine winter-bloomer if it is not allowed to bloom during the summer. In other words, if you want it to be a winter-flowerer, you must give it special treatment. Keep it as quiet as possible. Put it out of doors in a shady place, give only enough water to keep it from drying up, and avoid all stimulants that would have a tendency to excite growth. In fall,—say in September,—re-pot it, if necessary, or remove a good deal of the soil from the top of the pot, substitute fresh earth, and give more water than it has been receiving through the summer. It will soon begin to grow, and flowers can be expected from it by January, and from that time on to spring it will be brilliant enough to make the greenhouse look like a bit of summer. This treatment, it will be noticed, consists in reversing the natural order of things,—that is, it makes the plant stand still in summer when it is natural for it to grow, and brings about growth in winter when it is natural for the plant to rest. R.

PICKING AND PACKING GRAPES.

At the meeting of the Chautauqua Horticultural Society, held at Brocton, N. Y., February 25, the topic of session was the picking, packing and marketing of Grapes. Mr. J. A. H. Skinner, who has a ten acre vineyard, lying in the village of Brocton, gave a pretty full account of his methods. The grapes, very nearly all Concord, are all picked by girls. The pickers ten in all, have each a number, and in picking each one on filling a basket, marks with the picking shears her number on the handle of the basket. For

example, the one who is number four, marks the letters IV; number nine, IX; number ten, X. In this way the responsibility for any careless picking, can be at once placed where it belongs. In picking, the golden rule laid down for all to follow—is—not how much, but how well. The picker is not allowed to touch the bunches with the hand, but to handle them by the stem. In packing, the cluster is lifted with the thumb and finger of one hand, and with the sharp pointed grape scissors in the other. All green, imperfect or bruised berries are deftly and rapidly removed. By this care in handling, the bloom on the grapes is preserved. The fruit after picking stands three or four days to wilt, before packing. Concords were shipped to the remotest cities in the Union, arriving in perfect condition. Of 10,000 baskets sold last season, the average weight was eight and seven-tenths pounds per basket.

None but perfectly seasoned baskets are used, green baskets causing mould. The baskets are carried by hand from the field to the storage and packing house, which is situated nearly in the center of the vineyard. Each spring this vineyard receives a top dressing of ground bonedust, muriate of potash, and salt, at the rate of 200 pounds of each of these materials per acre. Young vines, the first year putting on trellis, he prunes to two canes only, and to the weaker vines leaves only one cane.

In the older vineyard he leaves from five to eight canes, with not more than forty-five buds per vine. The coming season he proposes to have enough crates prepared to pick the entire crop before packing any. Where Concords have been picked two weeks or over in the warm weather of the fall, all the cracked and bruised berries will show some mould, but as in picking all these are scrupulously removed, no harm is done. The Concord is never fit for shipping long distances, except when it has been first carefully picked, then wilted, and then packed.

The packers soon learn to lay in the clusters so as to fill the baskets even and just level.

The crates for picking are made as follows: End pieces of Button-ball Cucumber, or some light strong wood, are sawed out fourteen inches long, and six

inches wide. Ordinary pine lath, cut once in two, form the bottom and sides, the inside measurement of the completed crate being 24x14x6 inches.

In regard to treating Grape posts to prevent decay, it was said that it did little good to tar grease timber. If seasoned timber is boiled six hours in gas tar, the durability will be doubled.

An article was read recommending soaking posts one week in brine as strong as it can be made. Some idea of the extent of the Grape industry in this single town may be formed by the fact that to this one station—Brocton—seventy-five carloads of posts, chiefly second growth chestnut, have been shipped this winter.

S. S. C.

FLIES ABOUT HOUSE PLANTS.

In your MAGAZINE for February I notice A. W., of Poughkeepsie, N. Y., is asking about worms that infest our house plants, the small white worm, about one-quarter of an inch in length, living in the soil and feeding upon the roots of the plants. He also asks about the little black flies that are constantly flying in and out of the soil of the pots. The little flies lay their eggs in the soil, which hatch into the little white worms, then the worms develop into the little flies.

I am not an entomologist, but have learned this from observation. I have noticed the worms when just developing into the flies. When in that state they are just able to crawl, and are still white, with very short legs and wings, both of which are also white. I think they come down through the hole in the bottom of the pot, for I have noticed a great many under some of my pots, which could not have gotten under the pots from the outside, there not being space enough between the stand and the edge of the pot to allow them to crawl under: moreover, I have noticed that the plants which are infested with the most worms would have the most flies under them.

About a month ago I commenced killing every fly I could catch, and have kept it up every day. I have just examined some of the plants which had the most worms, and can find none at all, although I have not used anything to kill the worms, merely killing the flies, which, I think, proves my theory. It is a great deal of trouble to kill them in this way,

but there seems to be no other. My plants are beginning to look a great deal better since I have adopted this plan. A good way to catch them is to lift the pots from the stand as early in the morning as the flies can be seen; there will be quite a number under the pots, evidently just hatched out, and found their way through the hole in the pot. It is likely the florists are not troubled with the worms, for the reason that the flies are kept down by the greenhouse being smoked with tobacco.

EDGAR M. KEITH.

A FLOWER GARDEN IN TEXAS.

I am now living within one hundred yards of the Gulf of Mexico beach at ordinary tide, and trying to make a flower garden in the rather sandy soil. My success last year was not as great as I could have wished, though not entirely a failure, as all my neighbors predicted it would be. In fact, owing to drouth and east winds, it was an off year in the city for gardening of all kinds. Probably my greatest success was with the Abronia, which gave me a mass of Verbena-like flowers for two or three months. It seemed to delight in the sandy soil, and not to mind the drouth much. Later on the Petunia gave a brilliant mass of flowers, attracting nearly all the passers-by during the greater part of the summer. Still later, the Portulaca seed which I had given up for lost came up after a rain late in June, and gave such a mass of bloom as is seldom seen, literally blooming until cold weather. The Phlox did pretty well, though badly injured by bleak winds early in the season. But when it did bloom the flowers were more brilliant than those in any other garden in the city, as far as I observed. The Sweet Alyssum was the first flower to put in an appearance. The Balsam, Candytuft, Stocks and Snapdragon succumbed to dry weather and cold east winds. I have left the Stock and Verbena seed to your selection, merely saying that it will be planted in what is nearer sand than soil, but I hope to have some success with both this year, as well as with the other failures of last year.

The Gaillardia shown in a colored plate of the MAGAZINE, grows wild all around the place where I am now living, giving its blooms as low down on the beach as any vegetation exists, and in al-

most pure sea sand. It put out its blooms last summer in spots within a few feet of ordinary high tide. I have been told by some people here that they cannot get the plant to grow when taken up from the beach sand and transferred to richer soil in the garden, further up in the city. It certainly does not seem to be affected by salt water, which effectually killed the root, branch and seed of other plants over a large part of the city, in the overflow of 1886, and which I thought would kill out the seed of the flowering beach plants as well, of which there are several kinds, but I have not missed a solitary species from among them since the overflow.

The Oleanders have had a hard time of it in this Oleander city since the winter of 1880-81, when they were badly frozen, and many large trees had to be cut down. In a year or two, the rest of the larger ones were killed to the roots by cold weather, and since that time the "freeze-outs" and other mishaps seem to have come just often enough to prevent the shoots, which persistently come up from the roots, from attaining their former size. The storm of 1886 killed many of them to the ground, while a cold wave, the tail end of the Dakota and Minnesota blizzard of last January, has given them another set back this year. R. B. S.

A NEW USE FOR FLOWERS.

The following letter announces a new use to which flowers may be applied under certain conditions. All fruit-growers are not so situated that they could follow the example. The fruit itself must have been of first quality; flowers will not sell poor fruit. If one has good fruit for sale he will do well to brand it in such a way that the public may know it:

Last spring I gave you two orders for flower seeds to start a flower garden to decorate my prime baskets of Peaches with. I write to inform you that my garden has been a great success; I cannot find words to express to you the great beauty of my flowers. I have been almost overrun with visitors for the last month, all of them saying that they never saw such fine Asters, Verbenas and Pinks, and, in fact, all kinds of flowers that I have. One gentleman, a great lover of flowers, who visited me some time ago, said that he had visited several flower exhibitions, but never saw such a grand display. I have some of Vick's Japan Cockscombs that measure one foot across them. When I started my garden, last spring, a great many people laughed at me, and said the seeds would not come up, and that

Peaches would not sell for more by having flowers on them. As soon as I commenced to ship flowered baskets they were all engaged by fruit dealers on Broadway and Fifth Avenue, in New York City, paying me from \$2.00 to \$3.50 per basket, when other folks' Peaches did not bring one-half the price. It is now my turn to laugh, but they have nothing to say, only the flowers are very pretty. They all want me to save them some flower seeds, but I tell them to send to you for some, for it will not pay me to buy flower seeds and give them away; only to my good friends will I give seeds. I think you will receive a great many orders for seeds from these parts next spring.
B. L. M., T——, *New Jersey.*

IN SPRING.

In the Apple tree sings the blue-bird,
In the Maples the robins swing,
And the Violets blue, in the morning dew,
Are whispering all of spring.

Across the meadows the zephyrs
Dance lazily to and fro;
While odors sweet spring up at their feet,
Wherever they come and go.

In the garden the yellow Crocus
Its golden banners toss,
And Anemones hide on the warm hillside,
'Mid the leaves and tangled moss;

While the brooklet gleams in the valley,
Where the downy catkins nod;
And Lily bells peep where the Myrtles creep,
All over the tufted sod.

MAUDE MEREDITH.

SUBSTITUTING.

I believe I am stating an undeniable fact when I say that there are no misrepresentations or mistakes possible to be made by any dealer, so intolerable, so irremediable, as those made by florists. They advertise that they will correct any mistakes or losses, if notified immediately. But these are often of a nature that cannot be ascertained at once.

Of course, the chief reason for the disappointment lies in the fact that we lose a whole year generally in a case of this kind. When we receive the fascinating catalogues, in the early spring, we read of many flowers we want, but there are a few we feel we must have. And when we have bought them, we pot, and shelter, and nurse, and watch them with the most eager impatience, and when the disappointment comes, we are fairly heart-sick over it. It is very cruel, and a conscientious florist who considers the matter well, will send exactly what is wanted, or nothing. Not to receive what one wishes is a small matter. It can be ordered elsewhere.

In getting up a club, one lady ordered

a *Hydrangea grandiflora* for another who dwelt in the mountains, where only hardy plants would live. A common *Hydrangea* was sent, but not being familiar with the leaf, the substitution was not discovered for months, and the plant was useless.

Another lady wished particularly for a yellow Carnation, but the one sent proved to be white.

One dealer offered some wonderful ever-blooming, large-flowered, highly perfumed, white Carnations for premiums, and after waiting a year the happy owner discovered, one day, a pink bordered flower, and during the second summer obtained, perhaps, six blossoms.

One, who did not like red Roses, made out a list without one of that color. But a few months afterwards it was found that several belonged to the obnoxious class.

Another, who had all the red and yellow *Chrysanthemums* she wished, selected a variety of other colors, but at blossoming time there was a bold display of brick red and chrome yellow.

A lady who is working gradually into the florists' business, sent for the new large-flowered *Verbena*, Century—red, with white eye—and took the new growth all summer for propagating. When, at last, she permitted one to bloom, behold it was just the old common kind of which she already had an abundance in her grounds.

"Substitution" is inexcusable. Suppose I order brown ladies' cloth for a dress. Would any reputable dealer substitute a blue, because he had none of the other? A florist has no more right to send me a red Rose when I pay for a white one. He cannot know what I already have, nor what I like or dislike.

If I wish a velvety crimson, much twisted Japanese *Chrysanthemum*, does a yellow Chinese plant supply me?

"KATE ELLICOTT," in the January number of this MAGAZINE, makes complaint about Storm King Fuchsia, and says it must have the best of care "or its flowers will not be a whit larger than *Speciosa's*." This is probably another case of "substitution." One of my friends purchased a veritable Storm King two years ago, and it was all that the advertiser claimed. The blossoms were immense, although it received only

ordinary treatment. It was necessary to remove many of the buds, or the plant would have been broken by their weight. The *Speciosa* no more compares with it than the blossom of the Safrano Rose compares with that of American Beauty.

A. W., *Placer Co., Cal.*

A WELCOME.

Well, April, so you're here again,
To drop your smiles and tears;
You are a changeful, fickle maid,
(I've said the same for years.)

But there is a peculiar charm
About your fickleness;
Our ears are always glad to hear
The rustle of your dress.

Your smiles are bright as smiles can be,
Your tears no heart could chill;
For 'neath them flowers rise into bloom
On every plain and hill.

The little rills go wand'ring
And singing to the brook,
And brooks meander to the sea,
Among the shadiest nooks.

The spring birds chatter here and there,
And sweet songs upward rise
From every tiny bough that lifts
A green bud to the skies.

Aud tho' your wind-swept robes may trail
Sometimes in dew and mist,
They quickly dry and deck themselves
In gold and amethyst.

Then have your way. The coast is clear,
We would not check your speed,
Since roguish smiles and copious tears
Hide many a loving deed.

MRS. M. J. SMITH

THE IDAHO PEAR.

A chance seed among others carried to far off Idaho, produced a pear there which is so remarkable in form, size, color, foliage, and fine quality of fruit, as to have excited great interest among the readers of agricultural papers, and great anticipations among planters. From a letter by JOHN H. EVANS, of Lewiston, Idaho, it would seem that the seed must have come from the blossom of some tree fertilized from a Chinese pear blossom, or vice versa. He writes: "I did not think the Idaho related to the Chinese pears, which are poor in our high latitude, although reported so fine in the South, but several have suggested it, and Professor BUDD writes, after having examined leaves of the Idaho which were sent him by request—"thanks for the leaves, they tell a story that impresses me more favorably than before with this

new pear. No pear of the world has the peculiar serrature of the North China Snow pear, or the peculiar structure of the palisade cells of the leaf. The Idaho is a typical Snow pear in leaf, yet may be a cross with the West of Europe pears although the leaf does not show it." It is easy to see the resemblance between the Leconte and the Shalee pears and the Idaho, after its being once suggested. When one looks at the fruit, and the great excellence and beauty of the latter and its handsome, vigorous growth, we see evidence of a great leap of progress in this direction. W.

CULTURE OF STANDARD PEARS.

The following summary of a paper presented to the Western New York Horticultural Society, by JOHN J. THOMAS, of Union Springs, Cayuga county, N. Y., and read at the meeting in January last, contains some points in regard to the cultivation of Pears which will be of interest to many readers:

My orchards consist of over three hundred trees, occupying the ground somewhat irregularly, being mostly the remains of a nursery some twenty years ago. A part stand in grass, cut annually for hay, and another portion in cultivated ground in which crops of Potatoes, Corn, Parsnips, Turnips, Corn fodder and Sorghum are continually raised, with an occasional crop of Rye for plowing in as manure. A third portion has been in grass or clover a part of the time, and at other times cultivated with Corn and Corn fodder, after plowing in a crop of Clover.

The difference between growing in permanent grass, and in ground yearly cultivated, afforded rather interesting results. Several years ago, when the blight as an epidemic swept through the country, it destroyed more than one-half the trees in the continuously cultivated ground, but scarcely one in the continuous grass—the trees in both portions being the Lawrence. Notwithstanding this result appears to be adverse to cultivation, I have found cultivation to be the most profitable, and recommend it for similar orchards in preference to permanent sod, for the following reasons: The cultivated trees make the finest growth, and on those which bore heavy crops last season, I now find the annual shoots from six inches to a foot in length, the trees exhibiting a vigorous and healthy appearance. Those growing in grass are more stunted, with annual shoots not over an inch or two long. Both sorts bore heavily; but the Pears on the cultivated trees were large, fair, and so free from defects, that in carefully sorting for market, not one bushel in twenty was thrown out, and nearly all were classed with the "best;" while of those from the trees in sod, a much larger portion was rejected, and those which remain were one-half of the second quality as to size and appearance, and sold at much lower prices. I found, therefore, that more money is made from an orchard well tilled, even if one-half is destroyed by blight once in ten or twelve years, than from a greater number of stunted trees bearing low-priced fruit of second quality. I

shall plow up the remainder of sod at proper depth, and run the risk of losing the trees by some future epidemic attack. Through nearly all the years both alike escape. Both have been manured, one as a top-dressing on the grass, and the other with the usual application for cultivated crops. The portion in grass would doubtless do better if the grass could be well grazed by sheep, but this part is so situated that animals cannot be introduced.

A third portion of the orchard was cultivated in hoed crops a part of the time, and at other times was occupied with Clover, to be plowed in the second year. The trees here did well.

The whole orchard yielded over six hundred bushels the past season, nearly all of which were sent to commission men in New York and Philadelphia, and were sold at fair prices—mostly yielding a dollar a bushel on the tree, after deducting the expenses of gathering, assorting, packing, shipping, freight and commission, and the cost of the half barrels in which they were sent.

The rule was laid down and impressed on the minds of the packers, that a single defective specimen in the center of a package, would cause more damage financially, than the whole value of a barrel of fruit; and although unable to attend the work in detail personally, the rule was well observed. Every package had the shipper's initials, and the commission men were assured that the fruit was of equal selection through all the packages, and finding this to be the case was probably one reason that the Pears sold well up to the highest published market rates, and occasionally above them.

As it was an object to make the marketing as simple and easy as practicable, no fruit was held for prices to rise, but all was gathered and packed in the same day.

The following varieties were most largely raised: Bartlett, Lawrence, Howell, Anjou, Seckel and Clairgeau. The heaviest crops were borne by the Anjou trees. Flemish Beauty and Virgalieu, which for many years past were spoiled by scab and cracking, were fair the past season and sold at good prices. Bosc would doubtless prove an excellent market Pear, but being so excellent in quality, the few bushels which were raised were naturally reserved for home use, by those who, of course, had the privilege of the "first pick." There were about three hundred bushels of Lawrence, which having proved an excellent late autumn and early winter variety, were freely disposed of at that season of the year. The sorts which sold at highest prices were Bartlett, Seckel and Clairgeau, the Bartlett for its general popularity, the Seckel for its high flavor, and the Clairgeau for its surpassing beauty of appearance. It may be well to state that a reason why the fruit was so fair, was the spraying with Paris green given to the whole orchard when the fruit was as large as Marrowfat Peas.

MOON FLOWER THE FIRST YEAR.

Last spring, my daughters purchased seed of the Moon Flower. They grew, and the plants made such a tremendous growth that, whereas they were intended to shade an eastern window, they soon threatened to darken that side of the house. One day, in my absence, one of them gave the vines a pruning, somewhat after the order of cutting the dog's tail off behind his ears. When I saw it, I told them that they had spoiled that moonshine for the season, and perhaps for next year, also. The answer was, that they had just read that it would not bloom the first season. But now comes the discov-

ery; the vines immediately started a new growth, which soon showed blossom buds that would have opened in about a week. For three nights in succession I set boards over them covered with canvass, but one night when ice formed one-eighth of an inch thick, it cut them so that they turned black. Had they been cut a few weeks sooner, or had severe frosts kept away as late as some years, we would have seen the plants in flower. S. MILLER.

If cutting the plants back caused them to form blossom buds sooner than they otherwise would, then severe pinching the ends of the shoots would probably have the same tendency. Let a trial be made the coming season, taking plants growing near each other, of the same planting, pinching one in from time to time during its growth, cutting one back after it has made a strong growth, and leaving one or more to grow unpruned in any way. Who will make this test and report it?

INVALID'S WINDOW GARDEN.

"Why, Jennie, what has happened? One would suppose some 'alabaster box of precious ointment' had been broken, from the fragrance which fills your room."

"No; there's nothing broken, Phil; look in the bay window and you will find the explanation. Those Hyacinths have been such company and comfort all these winter days, from the time sister first potted the bulbs to the present, for I have watched and loved them as only an invalid would be likely to do."

"A 'window garden' in themselves, and a treasure to any lover of the beautiful, whether sick or well, I should think, and just in time for Easter! But I did not know you were the possessor of such a display, or that your predilections ran in this line: I should sooner have looked for some choice poem or engraving, Jennie, lying upon your table."

"Well, I never have given much thought to plants, until this very winter. Somehow a florist's catalogue chanced to meet my eye, I think one of the children must have left it in my room, and as I glanced over its pages I was unconsciously led out from myself, from my seclusion, from the chill of winter, into the joy of young life and bright spring days, and the lovely garden which my fancy beheld, until I was so filled with the subject that I began talking to sister about it all, and you know she needed nothing more to lead her to pro-

cure these Hyacinth bulbs so that I might have my garden even in the depth of winter."

"Why! what's here? did some prove to be worthless? Here are some which seem to bear nothing but leaves."

"Look a little closer, Phil, and you will see where the flower-stalk has been cut, for I could not consent to enjoy such brightness and sweetness alone. Those that were sent to afflicted friends were purely white and were exquisitely beautiful; those pink blossoms are lovely I think, and the purple, too, but the white were simply exquisite, perfect!"

"I suppose by next year, February, your bay window will have become a tangle of loveliness and perfume."

"No; this is what I intend to do: but perhaps you have never heard of the Invalids Society?"

"Never!—a sorrowful society, I fear. But how can you belong to any society?—you who can neither walk nor ride?"

"Why, just as easily as can be; I only wish I might have become a member years before I did, for I do not feel the walls of my prison now as I did before I became a member. We sustain our own monthly magazine, and the editor sends to invalids cards of membership, and publishes their names in connection with the names of those who volunteer to welcome them as they join, so that each one may feel at home at once.—Here is a copy of our magazine, **The Invalid's Visitor*, now in its sixth year, though I have known of it but a few months. A friend in England, wrote me inquiring about the circulating library connected with the Society, and as I confessed my utter ignorance, she then sent me the name and address of the editor, and some other particulars, and I at once sent in my name as a subscriber of the *Visitor* and a member of the Society, and O, such a world of delight it has proved to me, from the charming 'letter of welcome' to the latest 'token of remembrance.'"

"But you were about to speak of your 'plan' for next winter's window garden."

"Yes; I intend to treasure up all the choice seeds and bulbs I can procure, and share them with all the members who

*Published at Williamson, N. Y., Mrs. Kate Sumner Burr, Editor; price 50 cents a year.

care for them and who have no other means of obtaining them. By the way, Phil, it seems strange to me how little effort it requires to please people who have few pleasures, and how slow people are, who have never been greatly afflicted, to make any effort to prepare little pleasures for those who are deprived of the ordinary comforts and activities of life; it seems so strange!"

"Very strange; and I am glad, Jennie, that at last, invalids are placed in communication with each other in this wonderful new society."

"My Hyacinths and my invalids taken together, are making a new woman of me. They furnish me sentiments and pictures which I would not exchange for elegantly framed paintings, or bound volumes of the choicest poems."

PHIL.

A NEW GRAPE.

Never in the history of horticulture has there been any parallel to the improvement that has been effected within the last thirty-five years in the Grapes of this country. When, about that time, the Delaware, by a leap, reached the first place in quality—a place which it has maintained in spite of later arrivals—a new impetus was given to the culture of the Grape. Experiments were then commenced, and still are made, to obtain varieties that shall possess high quality—having in mind that of the best foreign varieties—and combining this with other desirable characteristics. The introduction of Rogers' Hybrids has done much toward making the attainment of this result appear probable, and quickening the efforts of originators of new varieties of Grapes by hybridizing. The best of Rogers' Hybrids, the Salem, Lindley, Agawam, Barry, Wilder, &c., are widely cultivated and are very popular, notwithstanding the fact that they have weaknesses that make them unsuitable for many localities.

JACOB MOORE, the originator of the Diana Hamburg, the Brighton and the Diamond, thinks that eventually there will be obtained seedlings combining the most valuable traits which are of the second or third remove from a cross with a foreign variety. It will probably be a long time before new varieties will cease to appear with greatly decreasing rapidity.

The latest arrival publicly announced is the "Mills." This variety is sent out for the first time this spring, by ELLWANGER & BARRY, of this city. It was raised by WILLIAM H. MILLS, of Hamilton, Ontario, by crossing Muscat Hamburg with Creveling. It is described, as follows: "Bunch very large, compact, shouldered, some clusters weighing over twelve ounces. Berry large, round, jet. black, covered with a thick bloom; flesh firm, meaty, juicy, breaking, with a rich, sprightly flavor. Skin thick; berries adhere firmly to the peduncle. Vine vigorous and productive; foliage large and healthy. Ripens about with the Concord, or a little later, and is a long keeper."

The introducers, who have tested it in their vineyard, are confident that it will be found a valuable addition to the list of choice fruits; though they do not presume to say that it will succeed in all parts, situations and climates. They recommend it to those who desire a Grape of high quality, and are willing to bestow upon it the care it deserves.

APPLE TREES AND POTATOES.

A Bulletin (No. 1,) of the Experiment Station of the College of Agriculture, of St. Anthony Park, Minnesota, dated January, 1888, contains reports on Russian Apples, Wheat experiments and Potato culture.

An orchard of Russian varieties of Apples, planted in the spring of 1885, lost, the following winter, thirty-two and one-half per cent. of the whole number by freezing. In the place of the thirty-seven trees thus winter killed, others were set, of varieties not before standing in the orchard. The summer of 1886 was as favorable for tree growth as could be desired, and the trees were well matured when winter set in. Of the sixty-five varieties in the orchard, not one started growth from terminal buds in 1887. Those which killed back only one inch or less, and, therefore, may be considered the hardiest, are as follows: Green Streaked, Voronesh Reinette, Flat Voronesh, Kursk Anis, Pointed Pipka, Titus, Gruchevka, Red Pipka, Aport Orient, Arkad, Yellow Calville, Heidhorn, Gipsy Girl, Blushed Calville, Hiberna and Ostroff's Glass.

"The experimental orchard in its two years' history has shown sixteen varieties

of Apples to be hardier than Duchess, when grown under exactly similar conditions, and side by side."

A Potato experiment made, last year, to test the effect of different planting sets on the yield, showed that the use of the seed ends of large tubers cut in quarter produced the greatest total yield, and the greatest quantity of merchantable tubers.

RINGING GRAPE VINES.

In a letter received from A. J. CAYWOOD, that gentleman deprecates the practice of ringing vines, which is adopted by some grape-growers for the purpose of coloring the fruit early; this result is obtained, but at the expense of sweetness and flavor. The effect on the market is to lower the price of the fruit. "The novelty and desire for the first Grapes that appear causes almost any one to take a pound or so along to the family, but the adults soon discover their inferiority, and they refuse to supply their children, who will eat anything in the way of green fruit, with more of such stuff.

"The Champion Grape, which no one in the country can eat, is having the same influence on the market, and both these nuisances should be seized by city authorities and destroyed.

"Grape-eaters generally become partially satisfied with their first purchases, and if not good, buy lightly afterwards, even when the market is supplied with good, ripe fruit."

HANDSOME FOLIAGE BED.

A foliage bed growing, last summer, on the grounds of Ex-Governor WESTON, at Manchester, N. H., in charge of the gardener, MICHAEL LYON, was much admired. It was a circular bed nine feet in diameter. In the center was a *Ricinus*, or Castor Bean plant ten feet high, and around it were three brown Cannas, and a second circle of six green Cannas, and another circle of eight plants of *Caladium esculentum*. One leaf of these last named plants measured forty-one inches in length and thirty-one in breadth, the plant on which it grew standing over five feet high. One of the plants had eleven large leaves. The bed was made up preparatory to planting with mixed loam and rotted manure.

AN APRIL SHOWER.

The warm, sweet rain is falling
From April's changeful skies;
The green leaves on the Willows
Laugh out their glad surprise.
The Violet wakes from dreaming
Beneath the dead year's leaves,
Each blossom adds its brightness
To webs that spring-time weaves.

The robin in the Maple
Sings fitfully and low,
As if he'd half forgotten
The songs he used to know;
His little heart is happy
As from his burnished wing,
In pauses of his singing,
He shakes the rain of spring.

The buds on Oak and Elm tree
Seem growing as we look;
Spring legends are repeated
By the babbling little brook.
The air is full of sweetness,
The skies are brighter blue,
The rain that falls in April
Makes all the old world new.

EBEN E. REXFORD.

TRADE LITERATURE.

ELLWANGER & BARRY, of the Mount Hope Nurseries of this city, have this Spring issued new editions of their Descriptive Catalogues of Ornamental Trees and Fruits, and select Roses, all three of which will be found to contain a great mass of information in regard to the hardy plants suited to this country, as well as the descriptions of varieties. Important changes, additions and improvements mark these editions, and they are really most useful handbooks of horticultural instruction, which all progressive horticulturists should possess. The Mount Hope Nurseries contain a greater variety of hardy ornamental trees, shrubs and perennial plants than any other establishment on the continent, and the catalogues here mentioned are of high authority on all they relate to. Those dealing with ELLWANGER & BARRY are sure to be well served.

LOVETT'S *Guide to Fruit Culture*, issued by J. T. LOVETT Co., of Little Silver, N. J., is quite attractive in appearance, with its illustrations of new fruits. This firm deals in all the well known and approved varieties of fruits, but also makes it a point to place at the front, new varieties of merit. The reputation of this company for good reliable stock and fair dealing is becoming widely known.

Trade lists have also been received from WM. S. LITTLE, of the Commercial

Nurseries, Rochester, N. Y., representing a large stock of Fruit and Ornamental Trees and Shrubs, with Roses a specialty.

Special lists are issued of new or particularly desirable varieties of fruits, and of Ornamental Trees, Rhododendron, Clematis, Roses, &c. A very reliable establishment.

We are also in receipt of trade lists from GREEN'S NURSERY CO., of Rochester, N. Y., representing a large stock of small fruits; T. S. HUBBARD & Co., of Fredonia, N. Y., dealers in Grape Vines and Small Fruits; at present make a specialty of the Eaton Grape; GEORGE W. CAMPBELL, of Delaware, Ohio, Grape Vines and Small Fruits; specialties, Downing, Jewell, Witt and Woodruff Red Grapes; GEORGE S. JOSSELYN, Fredonia, N. Y., Grape Vines and Small Fruits, with Fay's Prolific Currant a specialty; LEWIS ROESCH, Fredonia, N. Y., Grape Vines and Small Fruits; BUSH & SON & MEISSNER, Bushberg, Missouri, Grape Vines. All these parties can be relied upon for good stock and fair dealing.

HOME GROUNDS.

The following criticism on the article, "Improvement of Home Grounds," which appeared in the March number of this MAGAZINE, is sufficiently explicit; the object sought in the article was principally to direct the attention of farm and other country proprietors to the great improvement that might be effected on the home grounds by properly grouping and arranging trees and shrubs; and we can say that the writer only sought to present the subject in a general way, and no one is more willing than himself that it should be criticised. There are others, we are quite sure, who may have opinions on the subject, and if this introduction shall be the means of leading them out to express their ideas, the object in the publication of the article will have been gained.

In recommending the grouping of Liquidamber, Weir's Cut-leaved Maple and Weeping Cut-leaved Birch, I think, L. B. PIERCE makes a mistake. No more beautiful weeping tree is there in cultivation than the Cut-leaved Birch, but it is only when it stands out as a single specimen that its full beauty can be seen. Of course, there are places where it can be harmoniously associated with other trees, such as parks or grounds of large size, where a distant view can be obtained. In this position, with a background of Norway Spruce or Austrian Pine, it makes a beautiful and natural contrast; but as form-

ing, in a small lot, a group with such trees as Liquidamber, or Cut-leaved Maple, I cannot see a place for it. As an individual specimen, where the full characteristics of the tree can be seen at a glance, is the position it should occupy in a small lot, and if it can be planted where a dark background can be given it, it is still more enhanced in beauty. M. MILTON.

With a view to secure more fully the best ideas on the subject, the publishers of this MAGAZINE hereby offer a prize of Twenty-five Dollars for the best sketch of well arranged grounds of a country residence, the area of the grounds to be about the same, without being exact, as those in the article referred to, a half to one and a half acres; the walks, roads, grouping of trees, position of flower beds and borders, and all essential features to be fully described in connection with the sketch. This offer will be held open until the first day of August next, at which time all competing designs that have been received will be placed in the hands of parties competent to render a fair judgment upon the case, and their decision will be published in the September issue of this MAGAZINE. Afterwards suitable illustrations will be prepared, and publication made of the same in our pages. Competition is open to all, subscribers of this journal, or others.

NOTES.

SOME of the English papers mention the Smilax—*Myrsiphyllum asparagoides*—as the Wreath Lily. This is a little cranky, to say the least. This plant was popularized in this country, and its reputation for usefulness went across the water until it is now considerably raised in Britain. Here, Smilax is accepted as the common name for it, and under this name its reputation went abroad. What occasion to give it the additional burden of Wreath Lily? It will not do. The people say Smilax, and Smilax it will be. A name that has grown familiar by long usage is better than a comparatively meaningless and inappropriate one imposed upon a plant. Wreath Lily is an imposition.

THE Hudson River Peach orchards have been much injured by the cold of the past winter, and the crop will probably be but a light one in that region. Grand River Valley, Michigan, reports a prospective yield of a quarter of a crop of Peaches.

OUR YOUNG PEOPLE.

THE MISSING DAUGHTER.

April skies were brooding over the earth once more. The blue-birds had already heralded the spring. The grasses were every where pushing up green tips. Hardy flowering plants had thrust their crests through the brown soil. Already certain flower-eyes were peering round at familiar neighbors. Yes, the pretty cottage was standing just as they had left it last year. They had slipped underground then to sleep and rest after their work was done. Their brave efforts to please and make happy the young maiden of that cottage had quite worn them out.

But now they miss her cheery presence. How lonely the flower borders seem without her. Only a little laddie and lass come now, tip-toeing around and whispering to each other that they must not touch the flowers, because they are sister Maud's, and she is coming back again.

"If papa's going to bring her back," says Pet, "what makes mamma cry so much, and wring her hands, and moan so when she's in bed? And why don't she eat any more, nor sew, nor read, nor tell us stories? I didn't know before that mammas ever cried. It scares me to see our mamma cry."

"Me, too. Let's—let's pick just *two* little flowers and give her, and see if they wont stop her crying and make her love us again."

"Well; and let's kiss her and hug her, and hug and kiss her, till we just make her smile again."

"Yes, we'll do that, too," says "Junior," the father's namesake, and taking hold of hands away they scamper on their hopeful mission. Upon reaching their mother, who has heard their hurrying feet through the house, she springs excitedly from her chair, exclaiming,

"Has your papa come? Is Maud with him?"

"No, no, mamma," says Junie, (as she drops into a seat, with heart-breaking moan,) "we're just hurrying in to give you these flowers, and to hug you and kiss you, and coax you to smile again—"

"And to love us," chimes in Pet, "as you did before Maud went away." And they both fall to kissing and embracing her, while her tears stream afresh, as she thinks how their own lives in the future may be shadowed by this same trouble. But her every breath is an incessant prayer of pleading that Divine protection may follow and screen her daughter from harm. Then, putting her children from her, she says:

"My precious ones! I do love you the same as ever; but I cannot talk now. Go and play, dears, and have a good time."

"You tell us that all the time," says Junie, "and we can't play, we're so lonesome, and so—so sorry—because you—cry,—" and he chokes back the rising lump in his throat.

And now Pet swallows hard, and her chest heaves, and the tears come, but she bravely wipes them off; yet still they come, and still she wipes and presses as though to punch them back, while not a sound escapes the resolute lips to indicate her battle with the pent up grief that is almost breaking bounds at sight of her mother's fresh tears. But now she conquers, and clasping her mother's neck, with a brave laugh, she coos in her ear:

"I like to most cried just now, myself, but I made the tears go back, and now I'll make yours go back, too," and she softly pats the tired, sleepless eyes with her own wee handkerchief, while the mother rouses to a sense of her neglect of the little ones in this overwhelming sorrow, and exclaims:

"My dears, my dears! I will not cry any more," and bowing her head over them, murmurs, "I do thank Thee for these I have left." Then, clasping them closely, she says:

"My dears, you are old enough to remember now, that all this trouble has come to me and to your papa because sister Maud did not tell us she wanted to go away. When children have secrets that they do not want their parents to know, trouble always comes of it."

"Junie," cries Pet, "we'll always tell mamma everything, wont we?"

Ah, Maud, Maud, wherever you are, little do you realize what a wreck of the home happiness your graceless conduct has made. It is only the wreck of your own that you now realize and bemoan.

Let every mother's daughter beware how she casts off the loving care of parents—the safe shelter of the home-roof. If some restraints and duties seem irksome, if rebellious thoughts are prevailing, if rosy ideals of life elsewhere are portrayed for her enticement, if she find them a growing temptation, let her stop—*stop* before it be too late. Let her hold her right hand in the fire, if need be, rather than exchange her parents' home for the hollow promises of a comparative stranger, for, surely, if she do, only bitterness, misery and disgrace await her.

Could Maud Huntley have had the benefit of warning words, all might have been different. But having no confidant, she was influenced only by the seductive persuasions of a stranger. This fellow, in common with certain other unprincipled men, had advertised for a lady correspondent, and Maud read his notice in one of her father's weekly papers, and admired its phrasing. Here it is:

"A bachelor of 28 solicits the correspondence of a refined young girl of good social position, as a medium for mutual improvement and entertainment. Address, Lock box 68, Hartville, Penn."

This seemed to Maud to offer a very harmless method of diversion, and she was just in the mood to accept it. Various little matters had gone adversely of late, and she imagined herself unhappy—forgetting (or not knowing of) the words of Sophie Arnauld, who, in recalling her youth, exclaimed: "Alas, for the happy days when I was unhappy!"

Maud really felt that she must have some change, and here was an opening. While secretly mailing her first letter, she said to herself, "Of course, I am only doing this for the fun of the thing." This was the beginning. For six months, regular letters were exchanged, her own being addressed to a private box of which no one knew, except the post office officials, who winked knowingly at each other, and bobbed their suspicious heads in wise fashion.

Doubtless Maud's correspondent became convinced of her native refinement as he read her carefully worded letters and her modest disclaimers of his flatteries, (despite his knowledge of the fact that only brazen, coarse girls are supposed to respond to advertisements.) Could Maud have learned as clearly from his dashing style that he was not only vain and shallow, but heartless and unprincipled, she would have been safe.

As it was, there came a time when he had so far overcome her scruples, one by one, as to gain her consent to a "run-away match." He had often written that he had plenty of money at command, and hence she was not surprised upon receiving money to take her to the city, where he was to meet her, and where she supposed their marriage was to be consummated.

Upon meeting him—Staley, he had called himself—at the noisy station in the strange city, his appearance was not displeasing to her, and it gave her a sense of relief to be claimed by somebody in the noisy 'Babel. But she wondered at the amount of jewelry he wore, and felt herself decidedly plain beside him.

Her plea that they must drive immediately to a clergyman's residence, was overcome by the assurance that a private parlor at the hotel was the proper place for the ceremony. When finally, with palpitating heart, and nerves strung to their greatest tension, she was seated in the showy parlor, she firmly declined removing her wraps until a clergyman should have arrived. The trepidation—almost terror—which had seized her on the journey, now had full possession of her. What could it mean, she had wondered. Was she really in danger? Then, all at once, it had rushed over her that her mother was praying for her, and the very air, then, had seemed full of warnings. So she had fortified herself with the resolve that if everything did not seem exactly right after reaching the city she would be very firm and true to her impressions of anything wrong.

"Don't be foolish," said Staley, when she declined to take off her wraps, "we'll have a cozy supper the first thing, right in here," and he went out to order it. From another direction came the hurried proprietor apologizing about some mistake in the disposal of rooms. Then up

sprang Maud in her excitement, and grasping his hand, exclaimed :

"Excuse me, sir, but I am to be married this evening—immediately ; will not your wife and one or two others come in? It will seem nicer. I am a stranger and feel frightened."

"Where is the gentleman?" asked "mine host."

"He just stepped out to order supper. But, oh, I don't want any ; I can't eat."

Just then Staley appeared, bearing two bottles of wine.

"See here, sir," said the landlord, "I just stepped in on an errand, and find a muddle here. I learn that this young girl is not yet married, while you have been saying, to-day, that your wife was to meet you here to-night."

"Of course," blustered Staley, "this is all right. The lady is tired and nervous, and don't know what she's saying."

And now it was that the scales fell completely from Maud Huntley's eyes. If Staley was a fool, she was not. Turning again to the proprietor, she instantly retorted :

"I know what I'm saying *now*, and I beg to put myself under your care, and this fellow I never want to see again." With this remark she walked out of the room, followed by the host, who paused to say to the enraged Staley :

"When you've settled your bill, including the supper just ordered, you can have your luggage. Until then, get out of this house."

"Then, Maud, in her newly-found sense of security, rallied enough to say. "And I wish you much joy of your supper and mine."

Then what did that bejewelled man—that seeker of refinement in a correspondent, say?

White with rage, he hissed between his sneering lips, "Blast you!" Worse than that he dared not utter in presence of her new champion.

What an escape for Maud ! Surely her mother's prayers had availed against her own headlong recklessness. Ah, how frightfully wrong it all seemed to her now. How worse than silly—how wickedly idiotic. How could she—Maud Huntley—have been guilty of such conduct? It seemed incredible. These thoughts rushed like a flood upon her while being conducted to the proprietor's

wife, to whose care she was carefully consigned by her new friend, as though she had been a precious daughter of his own.

(So sacredly do honorable men guard the native purity and fair fame of woman. It is not they who throw out the poisoned bait, well hidden beneath fair phrasing, to attract the innocent and unwary.)

The kind woman's sympathetic greeting and motherly face proved almost too much for Maud's self-constraint. She could have borne reproof more bravely than kindness. When questioned, she spoke frankly of the great error she had committed, but declined to give her name or residence.

"Call me Miss Page, now," she said, "and give me work, please, that I may earn something to add to my slender purse to enable me to get home."

So the next day found her busily seaming up and hemming hotel sheets, while the swift stitches were watered with her tears. Painful thoughts of her mother's distress left her not a moment's peace until she thought to dispatch a sealed telegram, so worded as not to excite the suspicion of the home operator. It simply read, "Shall be home soon, safe and well."

But father-love and keen sagacity combined prove the sharpest of detectives. The next day a stranger was seen earnestly talking with the hotel proprietor, then a certain page in the "register" was examined. Next, a note was carried to Maud, who came near fainting as she read, in her father's hand writing, that she was quietly to make ready to accompany him home, that she would soon be escorted to the hack where she would find him awaiting her. "Control yourself," he added, "that no demonstrations of feeling may attract the attention of strangers. No words are needed between us now. My presence here at this time is sufficient evidence to you of the love I bear you, and I am still certain of yours for me, despite recent indications to the contrary.

"Everything is settled here. Your new friend understands that he and wife will be remembered by us in the future. So, now come home to your waiting mother."

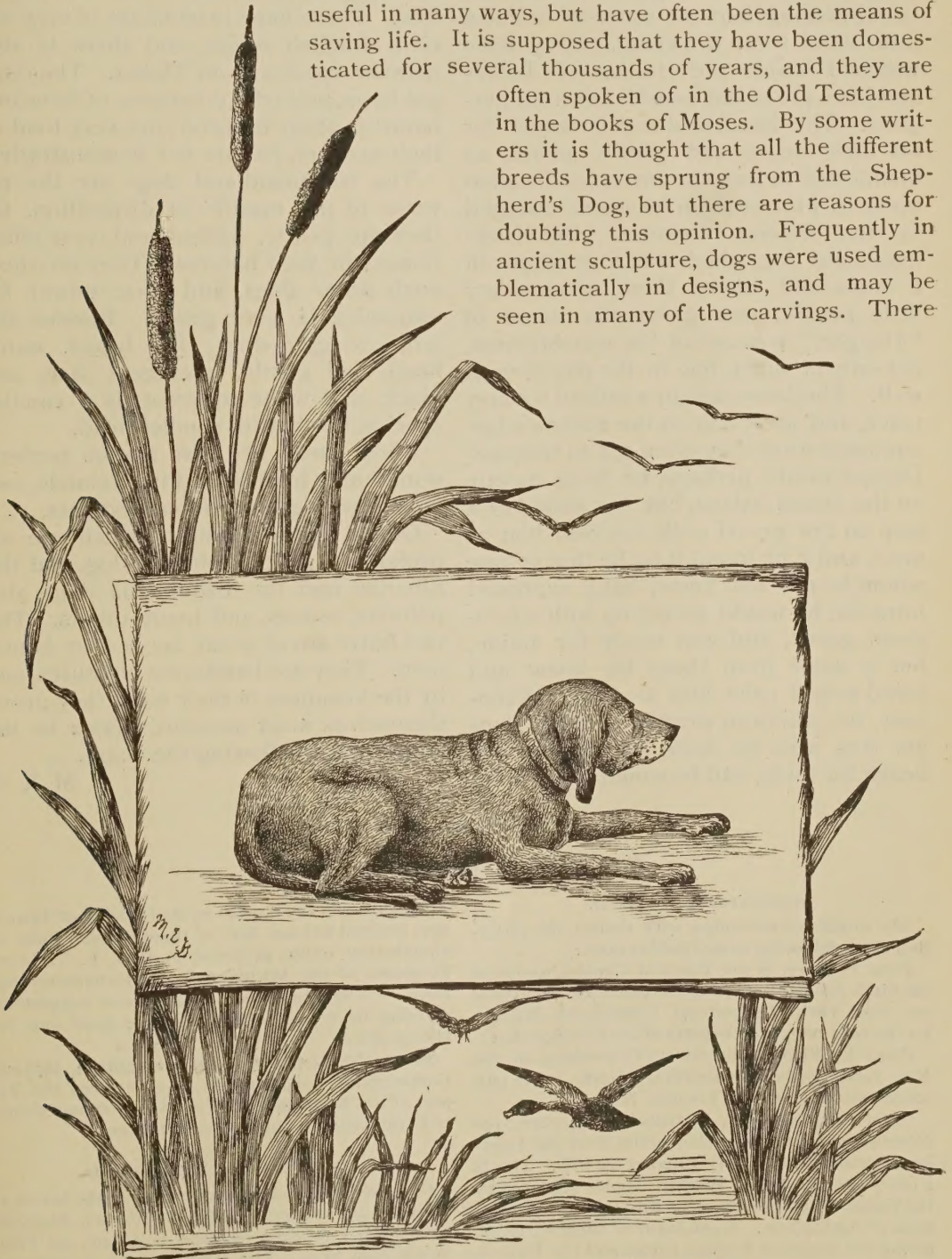
Such a note—such a father. How *could* she control herself, she thought, as with a heart full of emotion she made her hurried preparations to leave, constantly say-

ing to herself, "Unworthy daughter that I am." And thus we will leave her. But it must now be recorded that Maud Huntley has atoned for that one great error by becoming to her parents the greatest comfort of their lives.

MARIA BARRETT BUTLER.

FAITHFUL FRIENDS.

The name of "Faithful Friends" may be truly given to dogs, for they are not only useful in many ways, but have often been the means of saving life. It is supposed that they have been domesticated for several thousands of years, and they are often spoken of in the Old Testament in the books of Moses. By some writers it is thought that all the different breeds have sprung from the Shepherd's Dog, but there are reasons for doubting this opinion. Frequently in ancient sculpture, dogs were used emblematically in designs, and may be seen in many of the carvings. There



NERO AFTER A DAY'S SPORT—A POINTER.

are numerous varieties of these animals, and they are found in most parts of the world. They have been the friends and pets of man for ages, and at no time has

there seemed a greater fondness for them than at present.

From all the different varieties of dogs selections are made, from the huge mastiff and St. Bernard to the tiny terrier or spaniel. Many a story is told of the noble St. Bernard having saved travelers while trying to trace their way through blinding snow, or of the gentle Newfoundland plunging into the water to rescue a little child from drowning. They have watched beside the cradles of babies and have protected households from burglars. The Newfoundland is famed for his affectionate and gentle nature, as manifested to those he loves, but if called upon to protect them he seems changed to the fiercest creature. One Newfoundland dog, which was a great pet in a household where there were many little people, was given the name of "Danger," because of his watchfulness, not only at night, but in the day time as well. The home was in a retired country place, and as it was on the water's edge strangers were very often apt to trespass. Danger would, perhaps, be lying quietly on the piazza asleep, but the sound of a step on the gravel walk aroused him at once, and if he found it to be that of one whom he did not know, but a supposed intruder, he would spring up with a ferocious growl, and was ready for action, but a word from those he knew and loved would calm him at once. Whenever the children went in bathing, Danger was also on hand, waiting on the beach for them, and he would bring them

the sticks which they threw as far away in the river as they could. It seemed as if he dearly loved the water, and would never tire of swimming as long as it pleased his little friends to send him.

Another friend of these little people was a great English mastiff, and although devoted to the children, he did not so willingly allow them to pet and caress him. These huge mastiffs are of very ancient English origin, and there is also another species from Thibet. The dogs are large, powerful creatures, of ferocious natures; they, however, are very fond of their masters, but are not demonstrative.

The Newfoundland dogs are the reverse of the mastiff in disposition, for they are gentle, patient and very affectionate in their natures. They are thorough water dogs, and their power for swimming is very great. Besides the large, shaggy dog, with broad, noble head, and gentle, intelligent face, and black and white in color, is a smaller species, black, with smaller head.

Then there are the Scotch terriers, remarkably intelligent little animals, and most pleasing companions and pets.

Others besides these which are so useful are the shepherd's dog, and the Siberian and the Esquimaux dogs, also pointers, setters, and many others. The two latter are of great service to hunters. They are handsome creatures, and by the keenness of their scent they prove themselves most accurate guides to the hunter when following the chase.

M. E. B.

EDITOR'S MISCELLANY.

PUBLICATIONS RECEIVED.

We would acknowledge, with thanks, the reception of the following named publications:

From P. Barry, of the Board of Control, a copy of the Sixth Annual Report of the Board of Control of the New York Agricultural Experiment Station, for the year 1887, with Reports of the Director, &c.

From E. Williams, Secretary, Proceedings of the New Jersey State Horticultural Society, at its 13th annual meeting, held at Trenton, N. J.

From Charles Gibb, Abbotsford, Quebec, the Nomenclature of our Russian Fruits, from the American Pomological Society's Report for 1887. This is a list of the varieties of Russian Apples imported by the United States government through the Department of Agriculture. A catalogue of these varieties, giving the supposed Russian names and the English translation of them was issued by the Department. Mr. Gibb, from reliable data, corrects the list of Russian names, and suggests American equivalents.

It appears that the United States Department of

Agriculture, in the Report of its Division of Pomology, is about to issue lists of these Russian fruits, in alphabetical order, prepared by Hon. T. T. Lyon, President of the Michigan State Horticultural Society. "Thus," says Mr. Gibb, "these suggestions of mine have unexpectedly become fixed and unchangeable."

From the Department of Agriculture, through Commissioner Coleman, has been received the Report of the Statician on "The Numbers and Values of Farm Animals, and on Freight Rates.."

ALDEN'S MANIFOLD CYCLOPEDIA.

It is a pleasure to bring once more to the notice of our readers the good qualities of Alden's *Manifold Cyclopedia*, published by John B. Alden, 393 Pearl Street, New York. The fourth volume is now out, and is fully equal to the preceding numbers, and when we say that it is not only a very reliable Cyclopedia, but a complete dictionary of the English language, one may perceive how really useful it is.